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THE SPIRIT OF WEST POINT
W. H. STOCKBRIDGE



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A Camera-Huntsman's Equipment

MARIUS MAXWELL

(From "Stalking Big Game with a Camera.")



HAVE from time to time been requested to offer suggestions as to what equipment would be most desirable for a photographic trip to East Africa. Everyone has naturally his own choice and ideas in the matter of cameras, and I can only describe, as an amateur, the outfit that suited my purpose best, and give the reasons for my preference for a certain type of camera and the requisite lenses.

In undertaking the more awkward work of stalking the African elephant in its secluded haunts, the question naturally arises—why not make use of the advantages of a telephoto-camera?

A telephoto-lens would indeed facilitate the work greatly; but a moment's consideration will bring the conviction that a telephoto-lens of even moderate power will prove unsatisfactory, if not entirely useless, when it is intended to be used for animals whose habits are partly nocturnal, which remain in the dense bush during the day and are only to be found in the open at break of day or late in the evening when the light-conditions are such that even the most rapid of modern lenses will not always give sufficient exposure of the film or plate.

After innumerable failures and disappointments with extra-rapid films, I arrived at the conclusion that for this kind of work, where the use of a hand-camera is imperative, to photograph moving objects in poor light, lenses with the largest possible apertures are necessary, namely, those which work at $F/4.5$ or an even larger aperture. The duration of the exposure has to be limited to a maximum of one twenty-fifth part of a second, as with longer exposures it is difficult for the operator to keep the camera steady, taking into consideration the possibility that the exposures are to be made under con-

ditions of excitement, at close quarters with game that may prove truculent, and which at times is directly facing the operator.

Take for instance a telephoto hand-camera with a lens consisting of a positive element of $F/4$ aperture and, say, ten-inch focus, and a negative-element to produce two and a half magnifications, which may be accepted as one of the fastest lenses on the market at the present day. The equivalent focal length of the combination is here twenty-five inches and the resulting aperture $F/10$ correspondingly, even without altering the stop of the diaphragm. Comparing the relative exposures, that of the single lens alone, with $F/4$ as aperture, and that of the combination adjusted for two and a half magnifications, with correspondingly $F/10$ as aperture, we find that even this telephoto-combination of extremely low-power requires approximately six times the exposure of the single lens, and this would assuredly prove to be out of the question for moving objects in unfavorable light. Otherwise the range at which satisfactory game-pictures can be made with this type of moderate-power telephoto-lens—about fifty yards—is sufficient to enable the operator to prepare himself in case the animal resents the intrusion.

Other disadvantages attend the use of a telephoto-camera for work that is generally carried out under conditions of inevitable excitement and haste on the part of the photographer, to say nothing of his having to avoid a probable multitude of obstructions with a limited space for manœuvring. The telephoto hand-camera, even quarter-plate size, ($3\frac{1}{4} \times 4\frac{1}{4}$) is rather bulky for bush work, and the projecting lens is very cumbersome, making it difficult for the operator to hold the camera steady. Sharp, accurate focusing is, moreover,

imperative. This takes time, and it would hardly be reasonable to expect the animal to pose for the necessary period, and particularly so in a face to face encounter, such as, for instance, with the subject depicted in the first illustration on page 6. This particular exposure demanded the use of a short-focus lens to suit the environment and of a large aperture for instantaneous work to meet the indifferent lighting-conditions prevailing at the time.

These points were, as I gather, largely responsible for C. G. Schillings's lack of success in endeavoring to photograph the African elephant in bush country with a telephoto-camera.

I am in entire agreement with Schillings that to find these elusive denizens of the African wilds in a suitable bush locality, with reasonable conditions of lighting, requires some effort and is also largely a matter of luck.

Telephotographs frequently show little depth of focus or definition and will not stand enlarging. The flatness of the picture increases with the intensity of the magnification; the results are likely to show not only less detail but also a pronounced vagueness in the surroundings of the subject. Some prefer this and desire the main object to stand out more prominently, leaving the environment somewhat out of focus. This is a matter of taste; but to most interested persons the details of the surroundings, as well as those of the animal itself, are of some value.

Photographing wild life at all times can only be achieved with success when a multitude of conditions are satisfied, and it is not often that such conditions are offered at the critical second when the operator thinks it is the moment to press the release of his camera-shutter. It is a common experience, and at times almost to the point of being uncanny, that some slight accident puts an obstacle in the way and prevents the operator from obtaining the desired result. A branch, a small twig, a few blades of grass; a small bush, conspicuously out of focus, are the trifles most frequently met with; they are sufficiently disastrous to spoil one's efforts.

On one occasion, after a good deal of exciting manœuvring, I happened to succeed in snapping a fine bull elephant at close quarters, but on development it was found that the film presented the creature with a tiny thorn twig circled round in front of one of its eyes, which made it look as though it were wearing a monocle. This was one of the more humorous mishaps. At other times the effect of chance obstacles becomes most aggravating.

As the result of experience I have found that, all things considered, the best type of camera to obtain clear photographs in bush-conditions

is the reflex, equipped with a rapid lens of six or ten inches focal length, working at F/3.5 or F/4.5 aperture. It was upon a camera of this description that I relied for the most part. It was made of well-seasoned teakwood and brass-bound for rough tropical wear. The apparatus was fitted with an efficient self-capping focal-plane shutter giving speed-adjustments for one to one thousandth of a second, suitable for slow bush-work as well as for conditions demanding a high speed, as in the case of fast-traveling game on the veld.

This camera outfit may perhaps be supplemented by a spare lens consisting of one of the modern fixed-focus telephoto-lenses, which are in reality mere long-focus lenses that have the advantage of requiring a camera-extension of half their equivalent focal length or thereabouts such as, for instance, the Ross Telecentric with seventeen-inch focus and aperture F/5.4, the Cooke telephoto-anastigmat 12½-inch focus and F/5.8, or the Dallon lens, similar to the Ross Telecentric. All three of these have the position of the so-called nodal plane a certain distance outside the camera and lens, and this accounts for the comparatively short extension required from the bellows.

Occasionally, for photographing the smaller game animals inhabiting the open plains of East Africa, such as the zebra and a number of species of antelope, I have made use of a telephoto-camera with great advantage. With bright light, exposures of one seventy-fifth to one hundredth of a second can be used in telephoto-work of moderate power with from three to four magnifications. The instrument which I employed is an ordinary quarter-plate (3¼ x 4¼) reflex camera with focal-plane shutter operating with speeds ranging from one-fifteenth to one-thousandth of a second for instantaneous work, and it is fitted besides with "time" and "bulb" exposure. The camera, which has not only to withstand the climate in tropical countries but also a fair amount of rough handling, is accordingly built of well-seasoned teakwood with the joints free of glue, being either dove-tailed or screwed. The front is fitted with a sliding box-panel to carry the telephoto-lens. The apparatus is neat and handy as far as telephoto-cameras can be, and may be used with either plates or film-packs. The woodwork can be covered with leather to render it less conspicuous, and the fittings lacquered or painted in such a way as to blend with the colors of the particular environment for which it is to be used.

To reduce the weight as much as possible a camera has been chosen for a maximum extension



UNWARE OF A STRANGER'S PRESENCE

Courtesy of The Century Company

MARIUS MAXWELL



Courtesy of The Century Company

THE EAST AFRICAN ELEPHANT

MARIUS MAXWELL

of eight inches, and this is quite sufficient for the lens under consideration.

The lens may be either a Dallmeyer Grandac or any other modern, low-power telephoto-combination. The one fitted to this particular camera consists of a combination of a well-corrected portrait-lens with a focal length of 10 inches and an aperture as large as F/4, and a negative element with four-inch focal length. The whole is mounted in aluminium for the sake of lightness; but in damp tropical countries the metal is in time liable to become corroded at the settings.

This combination covers a quarter-plate ($3\frac{1}{4} \times 4\frac{1}{4}$) with six-inch extension of the bellows, giving 25-inches focal length and aperture F/10, and would mean that compared with an ordinary ten-inch lens, the operator can be two and a half times as far away from his subject to obtain an image of the same size.

On a bright day, on the plains of East Africa, this combination permits of successful exposures being made of one seventy-fifth to one hundredth of a second, and sometimes even less. It is useful to bear in mind that on the veld in East Africa a telephoto-exposure is rarely attended with success after ten o'clock in the morning, owing to the intense heat haze, which causes the subjects to become abnormally blurred. It may be noted that Radclyffe Dugmore produced some remarkable telephotographs of game animals on the plains of East Africa, which appeared in his "Camera Adventures in the African Wilds".

For very close work in the bush, under awkward conditions, a handy metal stereoscopic camera fitted with the fastest of modern lenses may prove to be the most suitable type of apparatus.

The ultra-rapid Kinematograph lenses with apertures below F/2 promise to be excellent lenses for this kind of work, being, with the same light-conditions, approximately five times as fast as those with F/4.5 aperture.

A pair of these lenses fitted to a stereoscopic reflex camera might prove of the greatest use to the sportsman bent on making snapshots of game in secluded corners of the thick bush. A drawback with these large aperture lenses is, however, that they may not be sufficiently perfect to obtain sharpness in definition when used with their full aperture.

As for the requisite development equipment for a photographic journey into the interior of Africa, the ideal arrangement would be, of course, to have a complete outfit at one's disposal. The developing en route will give one many a useful hint, particularly with regard to correcting exposures. Such an equipment might be carried

in mule-trunks at a reasonable cost, but when a trek through a tsetse-fly infested country is in prospect the accessories will have to be carried by porters, which then adds considerably to the expense of the safari, since each additional porter has to be provided with his daily "posho"—ration of ground mealies.

In such circumstances, it becomes more or less a matter of necessity to make arrangements to preserve the exposed films or plates by packing them into air-tight storage tins as soon as possible after exposure, preferably on dry days, and the tins can be securely and conveniently sealed with adhesive tape.

A word may be expected on the subject of rifles, although for detailed discussion I refer the reader to the standard books on sporting trips. The bore of the rifle depends so much on the purpose for which it is to be employed. I may say that even when in pursuit of photographs of the African elephant I have rarely been called upon to use my rifle. A rifle is often too cumbersome to carry in addition to a camera, and hampers the stalking operations.

The method which I have found most successful for obtaining close photographs of the larger African animals, such as elephants, rhinoceroses, and buffaloes, has been evolved only after many unsuccessful trials. I have found that, while the sudden appearance of the photographer is ordinarily sufficient to scare even the most reputedly dangerous of the large game animals, yet, at the same time, it occasionally happens that they will not immediately resort to flight. In some cases the animal hesitates before retiring long enough for the stalker to obtain a picture; in other cases it may approach in an irresolute manner only to retreat disconcerted by the strange appearance of the motionless photographer; in still other cases it may resent and attack the intruder. My practice has been to rely as much as possible on the avoidance of all quick and sudden movements, and whenever possible, to stand quite still. It is remarkable how successful this procedure has proved. It need hardly be emphasised that no precise rules of conduct can be laid down. I have always had to adapt my action to circumstances, and I must refer the reader to the descriptions of my various encounters for a fuller account of the methods by which the pictures were obtained.

The key to whatever success was achieved in the photographs reproduced in this volume lies in my having realised that telephoto-work was incapable of giving me the quality and standard of the results which I desired.

(By Courtesy of the Century Company, New York.)



DAWN AND ON THE MOVE

BEATRICE B. BELL

Soldier-Pictures that are Different

BEATRICE B. BELL



CONSIDERING the splendid opportunities offered, how few really artistic pictures were made during the war. Perhaps views of street-parades, waving flags, and wildly enthusiastic crowds constituted the apparent spirit of the day. But the real pictures of soldier-life, the underlying purpose, the monotonous routine, the homely daily tasks; these were not made on gala days. Cameras in the hands of ordinary mortals were somewhat taboo in military camps; and as ordinary mortals are more often the ones who chance on the choice subjects for photography, there was likely a reason for the dearth of real pictures.

Personally speaking, I didn't make any soldier-pictures in war-time, so I am not being egotistical. The shoe fits me just as well as it does anyone. But now that restrictions are over, let's see if we can't produce something worth while: something that will thrill the beholder and fill him with pride in the protectors of his country.

The pictures that accompany this article are not offered as examples of real art; but merely as suggestions of soldier-pictures that are different. Opportunities in this line have in my case been

somewhat limited. I am at present living in a town which is in the line of march between two military camps. Usually, once a year we are favored with an over-night camp. Sometimes the "over" part is quite too small for photographic purposes. One who has dabbled in moon-light-photography or is proficient in the use of flashlight might see possibilities in the dark; but I need light and plenty of it when I make pictures. Some years ago I bought an exposure-meter. It was a very good investment. Aside from its expected proficiency in telling how much exposure to give with a certain lens-opening, it has proved to me many times that there was sufficient light when my eyes said there was not; and it has also decided that there wasn't light when my eyes thought there was. Consequently, when word came that the soldiers were due at six P.M. for an over-night camp and that they would start on their next day's march at six A.M. my camera, with the actinometer's consent, got busy at once.

The camp was a very busy place. Each man's work was cut out for him. Indeed, he was even too busy to know that I was trying to catch him in some pose that would fit into my picture.

The tents sprang up like mushrooms. A smell of wood-smoke and camp-cooking filled the air. Horses and mules went stumbling by on the way to the watering-place. The company blacksmith made the anvil ring as he got ready to shoe some weary horse. From among the tents came snatches of popular songs. Here and there were soldiers in various stages of cleaning up for the dance in the town-hall. Soap was in great demand, and any fellow who could cut hair had a steady job preparing his comrades for the event.

many varieties. The long shadows and low lighting are especially good for genre-work, particularly when the subject is between the light and the camera. And long shadow-time and rest-time are almost synonymous. What could fit the throwing off of responsibilities, the stretching out of tired bodies, the relaxation from the day's marching, better than the soft glow of the setting sun. Even the homely task of washing dishes is glorified when looked at in the right light. But sunlight, the fickle lady, can't be depended



ALL UP FOR THE NIGHT

BEATRICE B. BELL

The greatest difficulty I had was in keeping the curious onlookers out of my pictures. Just as I would decide on what, to me, was to be a masterpiece, some body or bodies, would saunter over into the limelight, and that would be another picture added to my collecting of "almosts". I am not one of those efficient personages who can rearrange a whole landscape, suggest that this gentleman stand a little to the right, that another remove his hat, that the lady should move out into the sunlight, and the baby must listen for the birdie in the box, and get away with it to the extent of producing a picture over which anyone would go into raptures. Posing is entirely out of my line. So if I do not find ready made what I want or haven't the patience to wait for it, I either look for it somewhere else or get over wanting it.

Morning and evening light is likely to include

upon to cheer the photographic eye on call. She was present at only one of the camps I visited. "Gray Days" would be a fit title for any of the subjects the other days brought me. Yet, one of these apparently hopeless days was a blessing in disguise. It was early morning, very early, in fact so early that most of the townspeople preferred to cuddle under the blankets for their last few minutes of Beauty Sleep. I blessed the Beauty Sleep. It got rid of most of the spectators. But the weather did not please me. There was a fog so heavy that it seemed to impede my progress. I breathed fog, I ate fog, I strained my eyes looking through it, my feet were wet ploughing through the wet grass, and my camera was heavy. I was saturated with fog and my disposition wasn't anything to brag about. The few people I met looked with condescending amusement at the



EARLY MORNING
THE WATERING-PLACE
BEATRICE B. BELL



DOING KITCHEN POLICE

BEATRICE B. BELL

camera. My disgust increased. By the time I reached the camp, I was ready to consign camera and people to some hot place. Suddenly through the fog loomed a soldier on horseback. Between us was a softening haze. Beyond was nothing. Silhouetted in dark gray against light gray. What a picture! I opened my camera with visions of salons floating through my brain. A last look before opening the shutter. There was nothing in sight but fog. My masterpiece had disappeared. Silently the apparition had floated through my little circle of visibility. Not even the creak of the saddle came back to give credence to my senses. I turned and followed the path taken by the horseman. It led to a little stream and there I captured "The Watering Place."

In soldier-pictures, the same as in much other photographic work, one is inclined to include too much. Simplicity of composition is the keynote to success. A single incident will hold the attention and tell the story. A soft-focus lens is a great help in softening details, and an anastigmat at full opening throws the subject into relief by diffusing the background. Knowing the possibilities and limitations of your camera is half the battle. How many times have people said to me, "You must have a wonderful lens in your camera." Of course, it would sound conceited to say, "It isn't the lens, but the skill of the person using it that counts," so I keep still. Naturally, I couldn't make good pictures

with a poor lens; but an expensive lens wouldn't be any help unless I knew how to use it.

A tripod, of course, is necessary if one wishes to take time-exposures; but there are very few opportunities for time-exposures. I never attempted any, for there is so much to be crowded into the small amount of daylight that the camp is a bustle of activity. Bulb-exposures are often useful. Doubtless any of the soldiers would be glad to pose, especially if the photographer promised a picture; but as I have said, posing is an art in which I am not a great success. Perhaps I might add that aside from knowing the limitations of your camera, it also pays to know your own limitations. It at least saves you from much uncomfortable embarrassment.

A great deal of the pleasure derived from photography is the satisfaction experienced in capturing something unexpected. So even when conditions do not seem exactly favorable, remember that preparedness often reaps its own reward.

[We are sure that this article will serve to encourage our readers to make military photographs that are different. Many will attend the usual summer camps of military instruction for the Regular Army, National Guard, Organised Reserves, Reserve Officers' Training Corps and Citizens' Military Training Camps in many parts of the United States. Let us all make the most of the opportunity. EDITOR.]

How to Use the Camera in Camp

E. H. BROWN

"Oh, come and go camping,
Go camping with me;
I'll show you a wonderful time.
No worry or care
Is ever found there;
Oh, come in, the water is fine."



HE chorus, gentlemen, of a sixteen-verse camping-song which commemorated a two-weeks camp, remembered as one of the best. The purpose of this sketch, however, is not to eulogise the joys of camping. Everyone knows the blistered hands, the sunburned neck, the "grub" shortage, the sharp stones in the bottom of the creek—and kindred pleasures. No need to advertise them. But, how are they recalled! By illusive memory only, or by definite, story-telling photographs?

Undoubtedly, every camper takes with him a camera of some sort. A camp without a camera would be like a frame without a picture. But, in looking over the results obtained by the average Kodaker when he returns from camp, you sometimes wonder why he bothered to take a camera along. There is that picture of John paddling a canoe, the devil bent for Timbuctoo; but John is looking into the camera, obviously having his picture "took". Then there is another which shows Harry pouring coffee on his bare foot, the while he stares at the camera. That photograph of Sam fishing would have made a fine genre; but, unfortunately, Sam had eyes for nothing but the little black box. Why? It would have been just as easy to catch John paddling when he was really going somewhere, Harry actually interested in his coffee pouring, and Sam while he was landing his fish. And the pictures, when developed and printed, would have been accurate, truthful records, and a pleasant surprise as well.

Many an amateur labors under the delusion that he must be as still as the pyramids when his picture is made, and only press-photographers have the mysterious power of stopping moving objects. With some types of equipment this is nearly true; but even in such a case, there is no excuse for the posed picture. Even the humble Brownie will make interesting pictures and will stop slow motion, if not too close. And whoever heard of fast motion in camp?

But suppose that the pictures are slightly blurred? Even with a defect like that, they are far more interesting than the stiff, self-conscious photographs that are commonly seen. This applies to any kind of pictures, of course;

but is particularly true in the case of camping-pictures.

The trip, introduced by the pæan of joy at the head of this sketch, was made by canoe, and our albums contain a series of pictures which detail the trip from beginning to end, gleefully backed up by our camping-song. And this in spite of the fact that it rained nine days out of the fourteen. The point I wish to emphasise, however, is that each of the pictures tells some story of camp-life—not the ordinary posed pictures, but *acted* pictures, some consciously and others when the subjects were engrossed with their duties or activities about the camp.

There is one of Frenchy, for example, when the minnows started biting him. He had yelled for a piece of soap—a "hunk", I believe, he called it—and I came running with the Ivory and the camera. I told him if he would "pretty, please" he might have the soap. Just then the minnows got to him. The resultant picture would not qualify Frenchy for a beauty-show, but it does exemplify a phase of camp-life.

When Frenchy with a dipper of ice-cold spring water chased Jess *sans* raiment all over the field, the picture obtained, while slightly blurred, is highly satisfactory from a historical point of view, though hardly printable.

A two-weeks camp necessitates some wash lady work. The ribs of a canoe form the finest kind of washboard, as any good camper will tell you. A picture of this interesting method of laundry work became part of the photographic history of the trip.

Scenes which show the loading of the canoes, the landing-place, the fire with the industrious cookee preparing the mulligan or flipping a flapjack, the "gang" around the table at "chow time", Jack sound asleep in the tall grass while the others pitched the tents, Tom returning from the chase with a rabbit the size of his palm, and similar scenes form a highly-prized collection because, in the entire lot, there are but one or two posed pictures.

Some of them are underexposed—badly. And the films got damp because of the continual rain. The carbon paper rubbed and some of the pictures, therefore, have a mealy appearance, as if they had smallpox. Good, bad and indifferent; but they are true story-telling pictures and, as such, they recall the trip vividly and accurately, as no set of posed pictures could ever do, and are interesting to friends as well.

Of course, you need not confine yourself to camping-pictures. You may be able to obtain some first-class negatives that in the future may be worked up pictorially, and you should ever be on the lookout for suitable subjects. But the pictures which tell the story of camp-life are the main things.

Perhaps a few words on equipment is in order. Life in camp is rather strenuous, conditions are primitive, and the camera used should be able to withstand plenty of hard knocks or be a cheap instrument that will not overtax the pocketbook to replace in case of damage. It should be small, too. A large camera is not only expensive to operate, but is too unwieldy to carry around. The result is that it is never at hand when needed. The small camera, on the other hand, accompanies its owner wherever he goes. A $2\frac{1}{4} \times 3\frac{1}{4}$ seems to me to be the ideal size. Contact prints are

not too small, and good enlargements may be obtained, if needed. A lens which works at F/8 is fast enough for all ordinary conditions, and many difficult feats as well. All the pictures of our camping-trip were made with a $2\frac{1}{4} \times 3\frac{1}{4}$ Ansco fitted with a rapid rectilinear lens.

Nearly everyone has an idea that he or she would be a wonderful actor, rivaling Mary Pickford or Rudolph Valentino. Tell them this is their opportunity and make them *act* the pictures you are unable to make unawares. And when you have developed the film and made the prints you'll have a record that you may take pride in showing to your friends, secure in the knowledge that they will not listlessly turn the pages of your album, with boredom plainly written upon their faces. Make them eager to see more of your pictures, because you have pictures of real interest.

A Method to File Negatives

ROBERT T. STANLEY



HE average amateur keeps his prints in an album where he can find them with more or less ease; but when it comes to the negatives he has a more difficult time of it. They are usually kept in a big box or in the envelopes in which they were returned from the printers. When he wants one for an enlargement or another print, he has only the approximate date that the picture was made for a clue as to where to find it.

For several years I have been a camera-enthusiast and during all this time I have used a vest-pocket camera. I soon saw, as my negatives began to pile up, that I would be swamped if I did not find some system of filing them. The system I finally decided on, and which I have been using for four years, is very simple and easy to put into operation.

I first obtained a thousand envelopes $3\frac{1}{2} \times 2$ inches. These are manila envelopes and are known to the trade as druggist's envelopes. On the envelopes I had printed spaces for the date, place, description and remarks. Later in one corner I placed the numbers of the envelopes.

I then built a filing-case, out of an old cigar box just large enough to receive the envelopes. The next thing was to make a set of alphabet cards to facilitate finding the envelopes when they were filed alphabetically.

This system worked very well while I was filing the negatives; but a year later when I was

looking for a picture of a friend in a group, I discovered that it wasn't filed under his name and that I had forgotten who else was in the group, so that I had quite a search before I found the right negative. I decided that the proper remedy for this would be a cross indexing system—but how?

Finally, my brother made the suggestion that I use a card-index in conjunction with the envelope-system in which the negatives were all listed under every title that I could think of at the time of indexing. The envelopes were then filed numerically and the alphabetic index-cards replaced with numbered cards every fifty envelopes.

This system has worked beautifully; and, to-date, I have discovered no flaws in it. If a group-picture is to be filed, there is a card for each person in the group and, of course, each card refers to the same envelope. If, as usually is the case in an amateur's collection, there is more than one negative of a certain person, only one card need be filed and the various negatives can all be listed on the same card with a short description and the date after each. Virtually all pictures should be indexed under at least two different titles as there are always two ways of looking at a picture—and you will probably think of more than that when you are trying to find it. For instance, the pictures made on some particular trip should be filed under the name of the trip and also under the name of the subject.

As the system developed, I discovered that it wasn't always advantageous to file only one negative in an envelope. Quite often there would be two and sometimes as many as six negatives of the same subject, made at the same time and from only slightly different angles. These are all listed on the index-card, of course, and notes made on the envelope; and, if all the prints are placed in the album, the distinction can be easily made so that there is no danger of getting the negatives mixed, even if they are all filed in the same envelope.

This system is by no means limited to the V. P. negatives, as envelopes can be obtained to fit any negative. Then, too, it is not necessary

to have the forms printed on the envelopes, although it is much handier and the additional cost is slight.

At first sight, this plan may sound as if it took a lot of time; but I can assure you from my personal experience that the time saved in finding the negatives you want after they are filed will more than balance the time spent in arranging the filing-system. Another good point is that the likelihood of losing valuable negatives is reduced to virtually nothing, unless, of course, the whole filing-cabinet is lost. And furthermore, if you are constituted as I am, you will have a good time working with anything connected with your favorite hobby—photography.

Something about Sulphite

J. R. HALL



SULPHITE of sodium is a very important chemical in photography. And the important part of sulphite is its quality. Yet, because compared with the fine chemicals, sulphite is cheap, many photographers give little or no consideration to the sulphite they use. Sulphite of sodium, Na_2SO_3 is a compound of sodium, sulphur, and oxygen. One of many similar compounds. In its well-known crystal form, of which the formula is $\text{Na}_2\text{SO}_3 \cdot 7\text{H}_2\text{O}$, it carries with it exactly its own weight of water. Thus, the crystallised form, all other things being equal, is only half as effective as the anhydrous or dry, considered weight for weight.

But the strength or quality of any sample of sulphite is by no means a constant. The following incident will show this. An enthusiastic friend of mine complained to his dealer about some developer refusing to work. It was an amidol-solution, made carefully with chemicals obtained from the dealer. After wasting some dozens of pieces of bromide paper, the enthusiast began to suspect the developer. The dealer opined that the amidol must have gone off, and replaced it from a fresh bottle. But this was only a preliminary to another bout of wasted time, light, and paper. The sufferer came to me.

I asked for remnants of the amidol and sulphite. The former looked all right, the latter was rather too small and clear looking, though those signs are by no means conclusive. Anyway, I tried it first. Now $1\frac{1}{2}$ ounces of good sodium sulphite crystals, dissolved in a pint of cool water without shaking (aërating), will completely neutralise

$1\frac{1}{2}$ ounces of pure concentrated hydrochloric acid, producing sulphurous acid in so doing. This sulphurous acid is an excellent stop-bath; but that does not concern us at the moment.

Hydrochloric acid, added to a hypo-solution, rapidly precipitates sulphur, producing a distinct opalescence which is followed by a heavy cloudiness. Even with weak, cold solutions, this action does not need many minutes to become noticeable. I made up a pint of sulphurous acid mixture with some of the sulphite, and gave it ten minutes rest to allow the sulphite every opportunity. Then, I added some of this to some hypo-solution. The result, an almost instant milkiness. This was clear proof of free hydrochloric acid. Sulphurous acid preserves hypo, and had there been no hydrochloric acid left, the hypo would have kept clear for days, even in use.

No further proof was needed that the sample of sulphite was not of fair quality. It was, in fact, very poor indeed, and probably consisted of half its weight sulphite, and the other half sulphate, for sulphite easily oxidises to sulphate, upon which hydrochloric acid does not act.

The illustration shows, in the measure-glass, some hypo-solution treated with sulphurous acid, after standing three days; in the tumbler, some similar hypo to which a spot of hydrochloric acid was added. Photographed three minutes after adding the acid.

To determine the exact percentage purity of a sample of sulphite, a very careful estimation must be made. This requires a burette and a $\frac{\text{N}}{10}$ solution of iodine, *i.e.*, the standard

solution which contains 12.692 gms. per 1000 c.c. Half a gram of the sulphite is dissolved in 50 c.c. of boiled and cooled water. After adding some mucilage of starch, the iodine solution is run in from the burette until a very faint, but permanent blue appears. Crystal sodium sulphite of the best quality should consume 74.7 c.c.s of iodine solution for each gram that is used.

However, the above is a delicate operation,

coloration stays; but care is necessary not to avoid adding excess of iodine, and the dropping must be done very slowly. If one sample takes twenty drops, and the other ten, it will readily be seen that the difference in quality is serious. The former may not be just 100% purer; but for practical purposes it can be considered near it. When the difference seems negligible, a number of tests, taking the average of results, is more reliable than a single one.

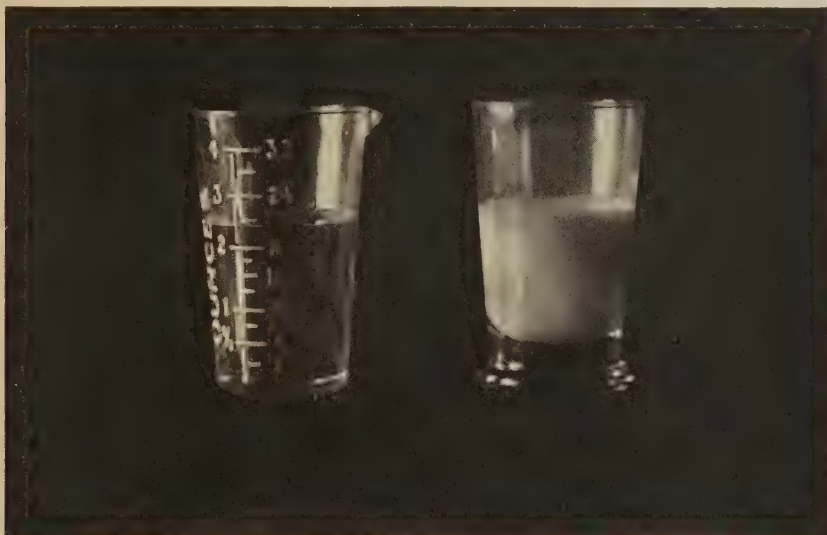


FIGURE 1

J. R. HALL

and for photographic purposes a comparison is easier and nearly as useful. If we have a sulphite that has given satisfaction, and there is the opportunity of buying another at half the price, iodine can be used to compare them. An easy way is to make up equal strength solutions of each with water from the same source. A convenient strength is one gram in 50 c.c.s. The weights must be carefully managed,—the two lots should be perfectly equal in weight—and the volumes of water exactly the same. For testing, some tincture of iodine as used by druggists, let down with its own volume of water, will serve. From each sample of sulphite in solution, an equal, but small volume is poured into a clean measure. Here again, the two must be exactly equal. Some starch-mucilage—made with arrowroot and hot water—is added to each, and iodine dropped in drop by drop, the drops being counted. The best sulphite will absorb more iodine before the blue

Sulphite of soda is not exactly an expensive chemical; but sulphite of poor effectiveness may, indirectly, prove very expensive indeed.



PHOTOGRAPHY is an aid to the outside contributor. Illustrations always assist an article; sometimes they are sufficient to make an unsalable article salable. Many articles are capable of being illustrated by means of the camera, and almost any photographic pictures are capable of being "written round." For example, a series of pictures, with brief letterpress, under the title, "The Strand from Dark to Dusk," showing incidents of traffic, such as a horse down, etc., would be easily disposed of to an illustrated weekly; such photographs could be taken instantaneously on a bright day without any difficulty whatever.

E. A. BENNETT in "Journalism for Women."

Practical Kinematography

HERBERT C. McKAY

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Chapter VII—Straight Work (continued)



YOU are an artist. There is no question about this statement if you are successful. The professional who has won his spurs is proud to be called an artist. Far too many people associate a male artist with a character of despicable femininity. It is true that the artist is sensitive, he has to be so, he appreciates delicacy in any form; but those of my acquaintance are far from being the type vulgarly known as a "sis". Some of the most manly men I have ever known were artists. But I digress. To return to the preparation for the day's work.

The next step is to fill the magazines. As to the exact procedure I can offer little advice. It is presumed that most of my readers have practiced some amateur kinematography and thoroughly understand the technique of this work. To my new readers, I suggest that "Kinematography for the Amateur" be read before this series of articles.

The magazines should be cleaned as carefully as the camera proper. If the valves or throats are lined with velvet these should be brushed with a brush stiff enough to penetrate the nap. This will remove lint, dust and particles of film which might spot or scratch the film. It will also raise the nap of the velvet, making the light-trap more efficient. In this connection I will mention "sunning".

Under certain atmospheric conditions, the enamel, with which the interior of some magazines are painted, will give off chemical fumes which fog the film. This is more usually true of magazines which have been closed for some time. To obviate this danger, the magazines should be opened and exposed to direct sunlight at intervals of a month or so. An hour or so will suffice to freshen the interior and prevent such fog. Like treatment will also help magazines which are lined with felt, velvet, corduroy or other fabric, as the fabric in such magazines will absorb dampness at times. Any magazine is helped by sunning periodically and no danger is to be apprehended in such procedure.

When the magazines are filled they are returned to the case. In this matter of cases I decidedly prefer the combination style, that is a case which carries the camera, extra magazines and accessories. The fewer parcels you have to

care for, the easier will be your work. You will always have the camera and tripod, which makes a minimum of two distinct packages. Then in studio-work you will often find a third case necessary for the effects and other accessories used in the highest class of work.

I have known news-men who fastened to the kiné-tripod a side support for a three and a quarter by four and a quarter or four by five reflecting or press focal plane camera to photograph stills. Many saleable shots may be made in this manner. I know one man, at least, who practically pays the operating expenses of his kiné-work by still sales. The veteran will oft-times snap a still with his left hand while cranking; but this is dangerous procedure as attention distracted from the motion-work as well as the absence of the steadying force of the left hand from the camera may ruin a motion-scene. However, it is good practice to carry a still camera on news and review work.

With cases open, pack the equipment. It is well to have a checking list, and pack the articles as they appear upon the list. In this manner, when the bottom of the list is reached you know that you have all of the required equipment. Nothing is more vexing than to travel miles to a location and arrive minus the crank or other indispensable part of your equipment. In professional production-work, such a mistake is unforgivable, and will result in a loss of reputation very difficult to live down. It is also a good procedure to set up as early as possible so that if any equipment is missing there will still be a chance to make a flying trip and obtain it.

When packing, make sure that each piece is in its allotted space and securely wrapped to prevent rattling about. A small bit of metal might scratch and mar the camera if loose in the case, even if no further damage were done. When the outfit is packed the next job is to go to the selected location.

When location is reached—and by location I mean the scene of action whether in travel, news, sport studio-work or whatnot—before removing the camera from the car, the first thing to do is to select the approximate angle. This is done by joining the tips of the thumbs with the fingers raised at right angle to the line of the joined thumbs. This makes three sides



"LEAVE THEM ALONE AND THEY'LL COME HOME
WAGGING THEIR TAILS BEHIND THEM"

ELLIOTT HUGHES WENDELL

of a rectangle, which will roughly determine the boundaries of the frame. The distance at which this "frame" is held from the eye depends upon the length of your fingers. The distance will be about a foot; but practice will soon enable you to use this frame without conscious thought as to distance. As but an approximation is sought in this manner, considerable leeway is allowed.

When the angle is found, the next step is to set up. The tripod is set up near the spot at which the most favorable angle was found. By "near" I mean within a foot or so. The legs are extended until an angle of from 50° to 70° is embraced. Then the full weight of the body is brought to bear on the tripod to see that it is absolutely firm. If it is the camera is mounted.

The height of the tripod is a matter governed by circumstances. A low point of view will result in objects upon the screen appearing disproportionately tall, and a high viewpoint will dwarf objects photographed. This fact is made use of quite often in changing the apparent size and shape of objects. I can think of no better experiment than taking a reflecting-camera into the open and trying various scenes from viewpoints of varying height. If you do

not possess a reflecting-camera, a finder made by cutting a rectangle of the proportions of 3 by 4 in cardboard and viewing scenes through it will be of service.

It would seem that the height of the average eye would be an ideal height for ordinary purposes; but, in fact, a point of view somewhat lower is better. From fifty to sixty inches is the most valuable range for everyday-purposes. Of course, there are often circumstances which force one to use extremely low or extremely high points of view. The latter is true in photographing events where a large crowd is expected to surround the cinematographer's station. Also in photographing an event where the action covers considerable depth the use of a "parallel" or platform about three or four feet high is of advantage, because the higher the point of view the broader the foreground and consequently the action may be spread over a greater depth than if the foreground and middle distance blended abruptly into the distance as is the case with a low point of view. Another point in setting up is the consideration of the angle and direction of the light. This should be the primary consideration in selecting the point of view; for proper lighting is vitally important.

When the camera is set up and threaded ready for action the exposure should be calculated. Now this is another point at which I desire to digress for a moment. There are today many veteran kinematographers in the studios who entered the field because it offered a livelihood. They entered while the game was young and took up kinematography without the slightest knowledge of the basic theory of photography. They learned by experiment and failure, but learn they did. There are photographers, kinematographers rather, in the large studios today who do not know the essential constituents of a photographic emulsion, who do not know the theory of the F/-system, who do not know a thing about orthochromatics and would not know a spectrograph if they saw one on the street. These men use anastigmat lenses, yet have not the faintest idea of what constitutes astigmatism. Yet they produce beautiful, exquisite film. They have learned by long experience. These men have earned our respect, that respect we owe to all sincere pioneers; yet, with all due respect we cannot agree that their method of learning kinematography is the better. Scientific training will produce a better kinematographer in a shorter time. Even at present, the man with ambitions to become a kinematographer is supposed to undertake odd jobs about a studio until he can get taken on regularly as assistant cameraman. Then for some years, about five usually, he carries the camera, holds the slate, keeps the exposure-record and so forth. Eventually, he takes on a sub-camera and finally blossoms forth a full-fledged cameraman. Did you notice that photographic experience or knowledge was conspicuous by its absence from his qualifications? Now this must change. Efficient business is founded upon an efficient personnel. The time is rapidly approaching when the studios will hire cameramen upon a basis of their knowledge rather than upon the time candidates have spent holding the slate.

Now what has all of this to do with exposure? Just this. The veteran has his exposures all tucked away in his brain—a result of trial-and-error experience. When he sees a newcomer using an exposure-meter his ridicule is loud and prolonged. Through his lack of scientific training, he does not realise that an exposure arrived at by scientific calculation will invariably be better than one based upon experience and human sense perception. Stick to your meter and the screen will tell the tale. In the largest studios the chiefs of the photographic staffs have long since read the handwriting upon the wall and have prepared themselves by study

and observation. These men, acknowledged leaders in kinematography will tell you that they recognise fully the value of the exposure-meter and that when in the least doubt as to the correct exposure they resort to the meter.

When you are all set, stand by until the action desired takes place. Do not film it all from start to finish, remember that two hundred feet of film will only run a trifle over three minutes. Try to select the high spots and shoot them only. As soon as you have made a scene, set the lens to two feet and make a crank-exposure of a large numeral such as can be cut from a large wall-calendar. You can thus identify your scenes perfectly yet dispense with the assistant and his slate. In studio-work, of course, the orthodox slate is used.

When the figure is photographed punch the film. Still better, crank once, open the camera and cut a triangular notch one third the depth of the film, close the camera and crank a foot. This identifies scenes beyond danger of being overlooked in the laboratory. When photographing individuals of note or of news-value, enter in your notebook their names from left to right. This information is invaluable to the news-editor and for your own later reference. When you have shot all of your material, pack up your instrument and go home.

The first thing to do is to get news-film in the mail. Then, the magazines are opened and dusted. If you expect to work within a day or so, fill your magazines, then if a hurry call comes, you will be prepared. Always have at least one filled magazine at hand for emergencies. Then clean the camera carefully. In short, follow out the instructions given at the first of this chapter. If you do this at night the next morning an examination will suffice so that the long job of cleaning will not delay you. Finally, pack the equipment and set it away in a clean, dry room.

[The interest in amateur kinematography seems to be on increase from the larger number of letters on the subject that we are receiving. Particular attention is being directed to the 16mm. cameras which are now on the market and others which are in process of development. As a result of this show of interest, we are planning to begin a series of articles on the 16mm. kinematographic cameras, how they are constructed and how they are used. We hope that these practical and interesting articles will serve our readers and help them to success in amateur motion-picture photography. The material is now in preparation and we hope to begin the series in an early issue. EDITOR.]

(To be continued)



DR. E. L'H. MCGINNIS
DR. T. W. KILMER



FIGURE 1

HILLARY GOODSSELL BAILEY

Photographer, Artist, or What?

HILLARY GOODSSELL BAILEY

LO rate, is man's big business in the social order. If not with financial power, then with public acclaim, or both. It's the dream of the banker, the merchant, the politician, the society matron, the educator, the artist, and—softly, the photographer. And that's as it should be.

But does he—the photographer?

No. He doesn't. Sorry, that's the truth. Not nearly so much as he deserves. Not nearly so much as he thinks. So interested is he in the intricacies of his several processes and manipulations and so appreciative of his skill in obtaining results from them—for the mechanics and chemistry of photography require a craftsmanship which permits a rightful pride in accomplishment—that he over-emphasises the amount of appreciation he receives from the world. Too much of what he gets is only the fancy of his own imagination. For to the general public he is only "the picture-man", to the art-world a despicable imitator, to the college professor a grafter, to his fellow colleague a hated rival and an "amateur". All of which is too much and not as he is. He should and must command more respect. Rate higher. Be bigger stuff.

It all began wrong at the beginning. Photo-

graphy should have been esthetic first, and mechanical second. Instead, the fascination of the mechanical and chemical eclipsed the esthetic until it was overlooked, if not forgotten. Which started photography wrong end first. True it has run an unusual course; so smoothly, in fact, that its professional passengers, accustomed to its motion, think that they are riding rightly. Even the definition in the dictionary is insufficient, for it merely mentions the mechanical and chemical phase. This conception is so thoroughly established that the profession thinks only in terms of cameras, plates, paper and chemicals. Artists with the same notion scoff and take it for granted that photography can only imitate, which is the lowest form of art—a thing to be despised and berated. Very grudgingly one author admitted that photography "only approaches artistic conditions when it is blurred, vague, and indefinite, as in so-called artistic photography, for then only can some amount of vitalising play be imagined to exist". Ruskin can be overlooked for classifying photography so impotently because of its infancy when he knew it. But our artists and critics of today display an ignorance which does not do them credit by their condemnations.

Art has three elements. First, *the idea* which



FIGURE 2

HILLARY GOODSSELL BAILEY

includes the individuality or personality of the artists and is sometimes called the life, "dither", imaginative value, the feeling, vitalising element, etc. That is, if art is a language, the thing to be said. Second, the *subject matter*, the material to be represented—to the photographer, the thing before the camera. Or in other words, the symbols of the language to express the idea. And third, the method of expression; the *technique*, which to the painter is the skill of using canvas and paints, to the musician the skill of performing on a piano or organ or the like, and to the photographer his skill in manipulating chemicals, paper, and the like. Photography is at fault for neglecting the first two elements. Its failure to rate is resultant from a dearth of the imaginative and vitalising values of art, and a neglect of consideration of subject matter. "Snap" and try to get a picture by manipulation. That has been the motto of photography. Is it

any wonder that it has failed to command sufficient respect? Before further progress can be made the photographer must acquaint himself with art. He has become skilled with his craft and technique. He must not only have an idea but know it, be able to select and arrange subject-matter to convey that idea, then he can use his photographic technique to present it.

Photography has limitations. But there is no reason that art cannot be produced by virtue of plates, chemicals, and paper as well as by paints and canvas.

In Greencastle, Indiana, the Phi Kappa Psi fraternity have a home of which they wanted a picture. A photographer was obtained who delivered a print similar to the one shown by Figure 1. A more inartistic mass can not be imagined. It looked like a jail—cold, barren, forbidding, and oppressive. And the fraternity were not satisfied. The photographer was an

adept technician. He had perfectly focused through an anastigmat lens of great expense, perfectly exposed, developed and printed. So he blamed the architect, who really does deserve criticism. But the fraternity tried again with Figure 2 as the result.

Here we have just an intimate part of the whole, selected with a knowledge of all the laws of esthetic composition. With a brush full of cheer, the last lingering rays of a setting sun filtering through the trees paints highlights

across the masonry. There is a breath of quiet romance and cherished memories. A suggestion of the mysteries that come with the shadows of night. There is the sinuous walk, the protecting archway, the charm of the flowers, the peaceful and quiet dignity of an attractive home. Vitalisation, there. Who cares how many stones the lens will pick out? It was sentiment the Phi Psi's wanted, and were willing to pay for; for the second picture cost four times that of the first, and was cheerfully paid.

In the Cave-Country with a Camera

RUSSELL T. NEVILLE



THE tragic fate of my friend Floyd Collins has turned the attention of the world to the Cave-Country of the United States. It has been my good fortune to visit the Cave-Country of Kentucky several times, the last time being in July 1924, when we spent three days with Floyd Collins in his own very beautiful Crystal Cave. There are about ninety caves in this immediate vicinity. However, only a few of them are open to the public.

Mammoth Cave, of course, is one of the wonders of the world. Discovered about 1807, so the story goes, by one Hutchins, a hunter, who pursued a wounded bear through the underbrush on the side of the Knob and saw it disappear into the opening of this cave, the Mammoth Cave has had a long and interesting history. During the War of 1812, saltpeter was leached from the soil, found a short distance inside; and the old leaching-vats, wooden pipe-lines and piles of discarded peter-dirt are mute evidences, today, of that historic struggle. Some historians say that the War of 1812 could not have been won by America without the aid of the powder made from this saltpeter.

Mammoth Cave is on five distinct levels, the lowest being the site of Echo River. This river connects with Green River on the outside of the Cave, and when Green River is swollen by spring freshets, Echo River also rises and sometimes entirely fills its rocky boundaries, making the usual tourist-trip on this interesting stream an impossibility. Echo River is the home of the eyeless or blind fish (*Amblyopsis speleus*) and the white crawfish.

Another very beautiful cave nearby, has been discovered, developed and opened to the public

within the last few years. It is Great Onyx Cave. One is taken down a flight of concrete steps right into one of the most beautiful rooms in this entire cave, and one of the finest we have ever seen in any cave, for that matter. Onyx Cave is extensive, very beautiful all the way and has many points of great interest. To get to the lower levels, one is permitted to enter a trap-door in the floor—a hole cut in the solid rock, and then down a long, twisting flight of steps to the bottom of a seemingly bottomless pit, where one finds a boat waiting to take passengers on a very short ride over a crystal clear pool. These steps one has just descended are a marvel of ingenuity and daring. Built along the sheer side of the rock-wall, in what is really a gigantic crevice in the rock, they compel one's admiration as an engineering feat. They were built by native Kentuckians who make no claim to being either builders or engineers.

All this material, as well as all building-material used in Mammoth Cave, must be carried in, for no animals or vehicles can be used. There is a small but comfortable hotel at Great Onyx Cave, and the scenery all about is rugged and beautiful.

About six miles from Mammoth Cave is Crystal Cave, owned by the lamented Floyd Collins and his father Lee. This cave is noted for its wonderful helictites, a formation similar to stalactites and stalagmites, except that the helictites are twisted and contorted into all sorts of grotesque shapes. Geologists say that this is the only known cavern where they are to be found. Stalactites and stalagmites are also found here in great beauty and profusion. There are acres of sparkling, glistening white gypsum-formations on the sides and ceilings of



THE BANANA-STALK



RUSSELL T. NEVILLE

LARGE GYPSUM-FLOWER



SOME HELICTITES

RUSSELL T. NEVILLE

the passage-ways which make all sorts of curious, beautiful, and intricate patterns.

The going in all of these caves is difficult, notwithstanding the improvement-work done. Paths have been laid out and leveled off, rude stone-steps laid up the towering hills of rock over which one must climb; and, in some places, ladders have been constructed to take one up or down crevices and steep rock-walls which occasionally block the way. In spite of the rough walking, the beauty and majesty of the rooms and passage-ways, of the pits and domes so divert one's attention that one walks on and on, heedless of the distance.

It was our pleasure and privilege to make several flashlights in Crystal Cave, some of which are shown herewith. It is a difficult task to get a clear, distinct picture of some particular formation against a background of similar character. The gypsum-formations especially are difficult to photograph, because of their crystalline whiteness and lack of contrast.

Floyd Collins, a typical man of these parts, spent his life in cave-exploration. He was more at home underground, prowling through unknown and uncharted labyrinths, in Stygian darkness, than most of us are on the streets of a strange city. He was rather a tall man and slender. He wormed and inched his way through cracks and crevices, through small holes and "crawl-ways" absolutely fearlessly. His power to

orientate himself bordered on the uncanny. It was his delight to explore not only his own wonderful cave, but others in that vicinity. Sand Cave where he finally lost his life, was simply a "ground-hog" hole, one of thousands in this region, and never was dignified by a name until it became famous as the place where he was caught by a cave-in. Floyd told some of his friends who went into this death-trap in an effort to rescue him, that he had just come up out of a pit eighty-five feet deep, and that further back was a cave rivalling in beauty anything he had ever seen. A loose rock barred his further passage, as he wormed his way upward, and he kicked it, thinking that he could dislodge it, and that it would drop back down from whence he came; but the jar caused a general collapse of the soft roof, and he was caught like a rat in a trap, and there he suffered the agonies and tortures of being buried alive. A most horrible death, but one he no doubt had often contemplated, and he accepted the gamble, unafraid, and lured ever onward by the new beauties his explorations opened up to him.

Colossal Cavern in this same neighborhood, is noted for its large rooms, pits and domes. Situated within its dark mysterious depths, is the great stalagmite, ninety feet high and called the Henry Clay. It is claimed to be the largest stalagmite known.

Old Salts Cave is one of the most interesting



GYPSUM-FLOWERS

RUSSELL T. NEVILLE

caves we have ever had the pleasure to visit, although it is not open to the public. It is so called by reason of the immense deposits of practically pure Epsom Salts found in its winding passage-ways. This cave is the only one which shows signs of human occupancy. Although explored for many miles, hardy pioneer "cave-men" tell me that every place so far entered, shows signs of having housed a prehistoric people. We penetrated several miles into its rocky interior, and found remnants of fires, pieces of gourds used as domestic utensils, bits of cloth and other signs left by these interesting folk. Local tradition has it, that the American Indians shunned these caves and held them in superstitious awe. A human body, mummified by the chemical action of the soil in this cave, has been brought to light. Scientists who have examined it say that it is the body of a girl about sixteen years of age, who had red curly hair and a light complexion. She was not an Indian and not a Caucasian.

About the only life found in the caves is in

the form of cave-crickets. These look like an immense grand-daddy-long-legs, slaty gray in color. They jump or hop several feet, if disturbed. Near the entrances, rat-tracks are sometimes found. Bats are quite at home in many of these caves. This Cave Country is about a hundred miles south of Louisville, Ky. and may be reached through that city by motor-roads.

We have visited them all. They are all beautiful and fascinating. After hours of sight-seeing, with an ever-changing vista just ahead, lighted by our lanterns as we make our slow progress and after marveling at the lofty domes and the seemingly bottomless pits, we come again into the sunlight, and the singing of the birds and the beauties of trees and flowers we see with a new and perhaps a keener realisation, the many beauties of nature so lavishly bestowed all about us. Then we realise, as never before, that some of the Great Architect's most beautiful handiwork is not on top of the earth but far beneath the surface, hidden from sunlight, and some of it only for eyes like Floyd Collins'.

Questions and Answers in Darkroom-Procedure

ED. C. JERMAN

Part IV

52. *Why should the time of rinsing be short?*

Answer: Because the developing-process continues during the rinsing time or until stopped by being placed in the fixing-solution.

53. *What is the proper time for fixing?*

Answer: Fixation is complete when the film is perfectly clear. The milky whiteness (apparent by transmitted or reflected light) should have completely disappeared.

54. *What is the required time for washing?*

Answer: Fifteen to thirty minutes.

55. *What is the required time for drying?*

Answer: This will depend entirely upon atmospheric conditions in your locality, especially humidity and temperature.

56. *Should the darkroom exclude all outside light?*

Answer: All outside light should be excluded, as even the light through a keyhole or nail-hole may fog the film.

57. *Which is the better light to use, red or green?*

Answer: The color is not so material. Quantity and quality of the illumination is most important.

58. *Where should the lights be placed in the dark room?*

Answer: An indirect ceiling-light to provide general illumination for loading and unloading of films, another light placed at the developer end of the tank for the trans-illumination of the film during development will usually suffice.

59. *How may a darkroom-light be tested for safety?*

Answer: By covering one-half of a film and exposing the other half for two minutes at a working-distance; develop and fix in the usual manner. If the exposed part remains clear, the darkroom-light may be considered safe; if fogged, the light should be subdued.

60. *What is a frequent cause of darkroom-light fog?*

Answer: The replacing of a burned-out lamp bulb with another bulb of a too high candle-power.

61. *How soon after a film is put into the fixing-solution may the white light be turned on?*

Answer: Immediately, provided the film is left in the solution.

62. *Does white light affect the solutions?*

Answer: No.

63. *Can an underexposed film be corrected by prolonged development?*

Answer: No. Prolonged development will only tend to give chemical fog, and will obliterate part of that detail which you already have.

64. *Can an overexposed film be corrected by shortening the time of development?*

Answer: Partly so. It is common practice to shorten the time of development. By so doing a better result may be obtained than by developing full time. The best result can only be obtained with a correct exposure.

65. *What is chemical fog and its causes?*

Answer: Chemical fog appears as a slight gray. It is caused by too long development at a given temperature. Age of the film also contributes to chemical fog.

66. *What is chemical stain and its causes?*

Answer: Chemical stain is any discoloration which appears on the film, other than black. It is caused by oxidised developer, too high developer temperature, insufficient rinsing, or an old, exhausted fixing-solution.

67. *What is light fog?*

Answer: It is a graying or darkening of the film caused by the film being exposed to light.

68. *What is X-ray fog?*

Answer: It is graying or darkening of the film caused by the film being exposed to X-rays.

69. *How can a film be tested for light or X-ray fog?*

Answer: By developing and fixing one of the suspected films without the usual X-ray exposure. If darkened to any degree, it is fogged.

70. *What are static marks?*

Answer: Static marks are fine, black, branch-like lines appearing on the clearer portions of the film, caused by the exposure of the emulsion to a static discharge. They may be produced during a part of the manufacturing process or at any later handling of the film before developing.

71. *What causes transparent spots on the film?*

Answer: They may be caused by any of the following: Kinking the film, spots on the intensifying screen, foreign matter of any kind on the film, air-bubbles in development, bubbles in the emulsion, storing films in a wet place, or by careless handling of the film while wet.

72. *What is abrasion and its cause?*

Answer: Abrasions are fine, black hair-lines ordinarily caused by friction on the emulsion. They are caused by any rubbing on the surface.

Service Suggestions.

Photographic Chemistry for Beginners

CHAS. FRANCIS HAMILTON



As a foreword let me say that this discussion is chiefly for the beginner in photography, though the more advanced worker who has not taken the time, or the trouble, to investigate the chemistry of the process whereby he achieves his pictorial successes, may also find it of interest.

There are few greater pleasures in photography, than watching—by the dim, red glow of the safe-light—the development of a special negative; or later to watch the building of the delicate values of the halftones in a print from that negative. And a knowledge of the chemical processes that make this possible, adds to the pleasure; and, at the same time, gives the amateur photographer more control over his pictorial process.

As there is little original in photographic chemistry, despite the volumes of printed matter issued each year which covers the researches along these lines, it will be understood that what follows is merely a selection of what the writer considers the more important of the fundamentals of the subject.

The Emulsion

Since all modern photographic processes have as a basis the action of light on silver-salts, the halides, the first subject presented is the emulsion.

The silver-halides are the bromine, chlorine and iodine salts of silver and are obtained by precipitation of a solution of the potassium or sodium salts, with a solution of silver-nitrate. The sensitiveness of the silver-salts varies with the conditions of the emulsion-making; but the bromide salt is most sensitive, and accordingly is used for plates and fast papers, such as bromide. The chloride-salt is used in emulsions for the slower papers and, in some instances, for plate-making.

The halides are of such chemical construction that the action of a very little light will affect them, leaving them susceptible to reduction or “development”, as it is usually called. In the earliest days of photography, the exposure was long enough for the light to darken the silver-salts; but as it was impossible to form images in the camera by such methods, the idea of allowing a primary action by the light to be developed by chemical action, was evolved and became the basis of modern development.

The emulsion-base is of gelatine. To make the emulsion, gelatine is dissolved in water, heated and to it is added the right amount of potassium

bromide—or sodium chloride, if a chloride-emulsion is being made. After the bromide is dissolved and thoroughly diffused through the solution, a previously determined amount of silver-nitrate is added, which reacts with the potassium bromide to form silver-bromide, which salt is precipitated out of solution. But as the gelatine-mass is viscous, the precipitation cannot settle to the bottom; but is suspended throughout the gelatine, in form of microscopic crystals, evenly distributed. This emulsion is then flowed over the plate or film, and when it dries and hardens, becomes the well-known photographic emulsion. With plates, some silver-iodide is also added.

The papers, both bromide and chloride, are akin to the plates and films, as far as the make-up of the emulsion is concerned. Care must be exercised in adding the silver-nitrate, in order that no excess of silver remains; as in that case, the entire plate or film would fog instantly on being placed in the developer. With papers that darken under sunlight, such as printing-out papers, there is an excess of silver, which aids in printing. Of course, those papers are not developed, merely toned and fixed.

The speed of the emulsion depends on the length of heating and the degree of temperature; the longer the cooking and the higher the temperature, the faster the plate.

As the halides are sensitive to the violet and blue rays of the spectrum more than to the darker colors, it is necessary to add certain dyes to the emulsion which increase sensitiveness to green, yellow, and, in the instance of fully corrected plates, the red. Even then, the use of a filter to hold back the violet and blue is necessary to obtain truthful rendering of the other colors in monochrome.

Color-sensitising is a subject in itself and cannot be further treated in so short an article.

Development and Developers

After the exposure of the silver-salts of the emulsion, the next operation is to develop or reduce these grains to metallic silver. This is achieved by immersion of the plate in a solution of a “reducing-agent”. A true chemical reducer is not to be confused with the photographic operation of reducing the negative; it is quite a different thing.

The reducer is an oxidising-agent, and because of its ability to oxidise rapidly, has the power to free basic metals from their salts. In the photo-

graphic instance it frees the bromine and leaves metallic silver in a fine deposit throughout the emulsion. Such reduction, of course, takes place only in proportion to the amount of silver-bromide affected by the light, during the moment of exposure.

As reducing-agents do not work satisfactorily when employed alone, the usual "developer" is composed of three or four chemicals. First, the reducer, such as pyro or elon; then a preservative, which is usually sodium sulphite, although sometimes the bisulphites or metabisulphites of sodium or potassium are used; third, the accelerator, which is an alkali, usually sodium carbonate, although potassium carbonate, sodium and potassium hydrates—caustic alkalis—and sodium borate are also used in various formulæ; and fourth, the restrainer, which is usually potassium bromide.

The duty of each is as follows: the reducer oxidises rapidly, thereby releasing the metallic silver from the salt; the preservative keeps the oxygen in the air and water from attacking the reducer by absorbing oxygen itself, and in this manner acts as a stabiliser of the developer; the accelerator, as its name implies, hastens or at least causes a continuation of oxidation on the part of the reducer, by reaction with the bromine released from the emulsion, causing formation of free oxygen, which in turn attacks the reducer, causing further oxidation. Thus a circle of reaction is established between the reducer and the silver-bromide and the accelerator. The duty of the restrainer is chiefly to prevent any fog, because of too rapid oxidation and also to avoid undue density in the highlights, especially before the lesser exposed parts of the negative can develop. The bromine released from the emulsion reacts with the accelerator to free oxygen, also forms more restrainer; thus it can be seen that after long use the developer contains so much bromide—restrainer—and has so little accelerator left, that it is useless; and, in instances where one tries to use it, stained and ruined negatives are the result.

Control of the development is somewhat in the hands of the photographer, by modification of the accelerator. An example of extreme modification and control is explained by Mr. E. M. Barker in *PHOTO-ERA MAGAZINE*, October 1921, page 174. Such knowledge is of value in isolated cases; but juggling of developers is no longer recommended in the "best circles", as it is considered much better to be able to expose correctly and develop along standard lines, than to depend for success upon some method of chemical sleight-of-hand. Also such methods are only really applicable in instances of known over-

exposure; for in case of underexposure there is no remedy; to expose correctly is best, always.

Reducing-Agents

The various reducing-agents have different characteristics, this probably accounting for the large number of them and the apparent popularity of each.

Pyro, the old reliable, and possibly the most popular, develops the highlights and the shadows at the same time, and by the time the denser portion of the negative is completely developed, the thinner portions—the shadows—will have sufficient detail. Of course, this is in case of proper exposure. Pyro also imparts a yellow oxidation-stain to the negative, which, although it makes the negative look dirty, gives excellent printing-quality. It is properly known as pyrogallol and is obtained from gallic acid, a product of gall-nuts, imported from China.

Elon (or any other metol) is the sulphate of mono-methyl-para-amido-phenol and is a coal-tar product. It causes the image to flash up all at once in the negative; but builds up contrast slowly. For this reason it is usually used with hydroquinon, another reducer, which is obtained from benzene. Hydroquinon develops slowly; but with great contrast, and the combination of the two reducing-agents is very satisfactory and forms the basis for the many M. Q. developers.

Kodolon is paramidophenol hydrochloride, a derivative of coal-tar. It works well without hydroquinon and with caustic soda as an accelerator, forms the base for many concentrated liquid developers sold today, such as Rodinal, Azol, etc. It is also useful as a hot-weather developer, as explained in *PHOTO-ERA MAGAZINE*, June 1922, page 300.

Amidol is diamidophenol hydrochloride, and is one developing-agent that works without an alkali. With sulphite of soda it forms an excellent developer for papers or plates. It has been little appreciated in the past as a negative developer; but recent formulæ submitted by various manufacturers which give its user a wide scope, have probably enhanced its popularity. It is also an excellent developer for temperatures over 75° F and is described in the article mentioned just above. Amidol is sold under that name, also Dianol, and Acrol, the latter being an Eastman product.

Glycin is famous as a stand-developer, keeps long, is the one developer that will not absorb oxygen from the air or any oxygen that may be dissolved in the water of the solution, and is absolutely stainless. It has been considered a slow-working developer; but in practice that is not so, according to the writer's experience.



AT THE SHRINE OF BUDDHA

E. L. THOMPSON

HONORABLE MENTION—TABLE-TOP PHOTOGRAPHY

Neol, a comparatively new developer, introduced by Hauff of Germany, is supposed to have great corrective qualities in instances of great contrast or overexposure. An example of its ability in presence of contrast is shown in PHOTO-ERA MAGAZINE, February 1924, on page 89, with a short explanation of the working-method on page 109 same number.

All the developers mentioned are used with plates or papers, in different proportions, except pyro, which has a tendency to stain the paper, as it does the negative.

The cycle of action of the components of a developing-solution is the same for papers as for plates. The restrainers are used in greater quantity for papers, and in this manner the warmth of tone of the resultant print is under control of the worker.

Fixation

The third subject is that of fixation. Upon completion of development of the film a creamy appearance is noted. That is the unreduced residue of silver-bromide in the emulsion; and, in order to have a printable negative, and to prevent this unexposed bromide from being reduced by light-action, it is necessary to remove it from the emulsion.

With papers this unreduced silver is present, though invisible owing to the opacity of the paper-support. Removal of the unreduced salt from the emulsion is accomplished by placing the film in a solution of sodium thiosulphite, or "hypo" as it is commonly known.

Hypo dissolves the silver-bromide by combining with it to form a complex salt, a silver-sodium thiosulphite. This salt is readily soluble in presence of excess of hypo; but not in plain water. For this reason it is necessary always to have a fairly fresh and not overworked hypo-solution. For, in cases where the hypo becomes exhausted, there is not enough free hypo to dissolve this salt, and it remains in the film to decompose and stain the emulsion, as is also described later in treating the washing of the emulsion.

As this complex silver-sodium thiosulphite is invisible, it has always been recommended in the past to allow the negative to remain in hypo twice as long as it took for the creamy appearance of the emulsion to be removed. In this manner it was certain that all the traces would be removed by the hypo.

But recent experiments along this line by Messrs. Lumière and Seyewetz have indicated that the negative is fully fixed by the time the

visible silver-bromide is dissolved, and that the various complex reactions of fixation take place simultaneously, in fresh hypo-solutions, thereby shortening the time of immersion.

This is actually true and is practical only when the hypo is absolutely fresh, for after each fixation, there is left a certain amount of silver-bromide in the hypo-solution and after a short time a considerable quantity, sufficient to retard the process of fixation, is present. Lumière's experiments indicated that the safety limit was two per cent.; in other words, when about three hundred grains of silver-bromide had been dissolved in a quart of hypo, the solution would no longer fix properly and attempts to use it would result in stained negatives.

It is impossible, of course, for the individual to know how much silver-bromide is dissolved, so a safe margin is established by the emulsion-makers, who advise that no more than five or six 5 x 7 plates be fixed in 100 cc ($3\frac{1}{2}$ oz.) of 20 per cent. hypo solution. This figures out that about 1600 square inches of negative-material may be safely fixed in a quart of 20 per cent. hypo. After use the rate of fixation becomes slower; yet, if sufficient time is given, it is safe.

Hypo is usually used in solutions ranging in strength from 15 to 30 per cent. The most common formulæ in the United States recommend 25 per cent. solutions, *i.e.* 8 ounces of hypo to one quart of solution.

Hypo is no longer used in plain solution—there are some exceptions of course—but with a hardener and an acid salt or solution, these being used to keep the gelatine-emulsion from absorbing too much water and swelling abnormally and to stop the action of the developer at once, when the plate is put in the fixer.

As hypo decomposes into plain sodium sulphite and sulphur when an acid is added to a solution, it is necessary to balance the acid carefully—the hardener and the usual preservative, that compose the acid-hardener addition to the hypo-solution. The most common acid-hardener is composed of sodium sulphite, acetic acid and potassium alum. The presence of the sulphite prevents or offsets the tendency of the acid to decompose the hypo.

Many formulæ recommend use of the acid sulphites such as sodium bisulphite or potassium metabisulphite, which decompose in solution, probably, to form a weak acid, sulphurous acid, and sodium or potassium sulphite, which acts as preservative.

Potassium alum is more often recommended as a hardening-agent, but chrome alum, though not really an alum, is much more efficient.

One of the best formulæ the writer has ever used was described by Prof. E. J. Wall in PHOTO-ERA MAGAZINE, March 1916, pages 120-125 and is composed of a 30 per cent. hypo-solution, with addition of 233 gr. chrome alum and $1\frac{1}{2}$ oz. sodium bisulphite lye solution—about $\frac{1}{2}$ oz. dry sodium bisulphite—to 54 oz. of the above mentioned hypo-solution. It kept long, fixed rapidly and was efficacious as a hardener.

However, any hypo-formula recommended by a plate-maker should be satisfactory for his plates and the amateur need not hesitate as to what formula to adopt.

One word of warning, do not use hypo to point of exhaustion as it is cheap, much more so than a half-dozen ruined plates, and one should test the solution occasionally; and, when it is found that it takes rather a long time to completely fix the negative, throw it away and make up a fresh solution.

Washing

The last step in photography is washing the negative or print, and though usually skimmed over, it is well to call attention to the importance of this step. Washing the emulsion in running water for a half hour, during which time, each plate, film or piece of paper is moving about freely and in contact continually with a fresh supply of water, will satisfactorily eliminate the hypo.

Where running water is not available, a series of rinsings or soakings in trays or pans will do. About twelve rinsings, in which each film or paper is handled, and the water constantly in motion, followed by carefully draining each film, emptying out the contaminated water and filling with fresh, or better yet transferring to a fresh tray of water after the draining operation, will also ensure hypo-free emulsions.

Hypo dissolves out of the emulsion at the ratio of one-half the amount, every two minutes under above conditions. It may be seen from this table, that after twelve changes, there is not sufficient quantity of hypo left to damage the most prized negative.

After	2 m'n.	1/2 hypo left.
"	4 "	1/4 " "
"	6 "	1/8 " "
"	8 "	1/16 " "
"	10 "	1/32 " "
"	12 "	1/64 " "
"	14 "	1/128 " "
"	16 "	1/256 " "
"	18 "	1/512 " "
"	20 "	1/1024 " "
"	22 "	1/2048 " "
"	24 "	1/4096 " "

Therefore, one can consider that after twelve



SAMPLES OF THE CHINA CLOSET

ALFONS WEBER

HONORABLE MENTION—TABLE-TOP PHOTOGRAPHY

washings of two minutes each, each in fresh water, and with films carefully drained after each washing, there will be no hypo to decompose and stain the negatives.

The reason hypo which is left in the film or print, discolours it, is that hypo has a great affinity for water and will absorb moisture out of the air. After a time, the action of the other materials in the emulsion, plus the tendency of the hypo to disintegrate, causes the hypo to change from the hyposulphite of soda to plain sulphite of soda and sulphur. It is the sulphur that discolours the film, and it cannot be removed.

Use of chemical hypo-eliminators, so-called, very likely changes the hypo into another salt of unknown quality, which may or may not dissolve as rapidly as the hypo itself. For that reason water is still the best eliminator.

Toning

Toning is an after-process whereby the color and tone of the print is altered. The most common method of toning is the familiar sepia-toning, whereby the metallic silver in the print is converted into silver sulphide, which is probably the most stable of all silver-salts and is unaffected by atmospheric conditions of the most unusual type. In the tropical countries, where many kinds of prints will fade and discolor, the properly toned sepia remains the same.

The method of toning commonly employed is known as hypo-alum toning. As previously mentioned hypo has a tendency to decompose in presence of an acid salt, and potassium alum having a slight acid reaction, is used with hypo to bring about that change. A print immersed in such a solution, as recommended by paper-makers, gradually turns sepia, as the sulphur that is thrown down from the hypo solution attaches itself to the grains of silver, forming silver-sulphide. Hypo-alum can be used hot—about 120 F—or cold, and improves with age.

A second sepia process is the bleaching and re-developing method. The image is bleached with a solution of potassium ferricyanide and potassium bromide, forming invisible bromide, which when treated with a weak solution of sodium sulphide, a very volatile salt, immediately forms the brown silver sulphide.

Other methods, used by more advanced workers employ dyes and more complex salts to obtain other tones. The pleasing tone, blue, is obtained by bleaching in potassium ferricyanide and ammonium bromide and toning in ferric chloride and hydrochloric acid, the addition of the iron salt forming the blue tone. Other tones are obtainable by addition of other metallic salts. This is an interesting field of photography and very pleasing variations from the usual black-and-white image can be secured.



PHOTOGRAPHIC CROSSWORD PUZZLE

WILLIAM LUDLUM

Horizontal (across)

- 1 A popular photographic abbreviation
- 6 A period of time
- 8 Some people put it in when and where it isn't wanted
- 10 A photographic plate
- 12 Girl's name, abbreviated
- 13 Going——!
- 14 Telegraph messenger's insignia
- 16 Fuss
- 17 Peculiar
- 18 The name that put Rochester on the map

Vertical (down)

- 2 Not him
- 3 Either
- 4 Small boy
- 5 Photography couldn't get along without 'em
- 7 The greatest of "fixers," plural
- 9 Support
- 11 Boy's nickname
- 15 Also
- 16 Girl's name
- 19 Doctor of Divinity



EDITORIAL



Photographing Pageants

A WELL-KNOWN New England newspaper had for the subject of its pictorial Christmas supplement an original photograph of the Annunciation. It was a feature of the biblical pageant arranged as part of the Christmas celebration of a prominent church in Greater Boston. The director was a lady who has a penchant for preparing spectacles of a religious character. Those who witnessed the pageant spoke in terms of praise of the beauty and effectiveness of the costumes. However, there were also not a few among the spectators who were inclined to be critical, and regretted to discover a certain lack of accuracy in some of the details and a number of incongruities which characterise the average historical or biblical pageant—unless produced under the personal direction of an artist-connoisseur. Of course, the customary photographs of the pageant were made by an eminently competent professional, and as records they were pronounced satisfactory. The photograph of the Annunciation, however—specially grouped and arranged by the lady who had organised the pageant, and published as the art-feature of the Christmas-edition of the newspaper alluded to—was seen by thousands of persons, many of whom, while admiring the spirit which inspired the theme, disapproved its several obviously inartistic features. The severest criticism was directed at the arrangement of the hands of the angel who was represented as *left-handed*! That is to say—the right hand clasped a bunch of white lilies, while the left hand was raised high in the act of making the prophetic announcement. This glaring incongruity, also the open twentieth century book in the Virgin's lap, and the ugly circular disc (halo) fastened to the back of her head sadly marred what otherwise might have been a commendable achievement. What a pity that in the process of reproduction the original photograph was not reversed, when the hands at least, would have assumed their correct place in the picture. But like the compositor, the reproducer is supposed to follow copy, unless otherwise instructed. Still, we remember to have seen in some book on art an inconsistent picture of the Annunciation. The angel was making an upward gesture with its left hand while holding a flower in

its right! It is possible that the picture was reversed while being reproduced.

Our acquaintance with the religious pictures of the art-galleries of Europe does not extend to left-handed personages, human or celestial. Among those whom we remember as performing an important act with the right hand, are Christ blessing little children; the angel, holding a palm-branch in the left hand, the right hand being upraised, appearing before the Virgin, in Raphael's Annunciation, in the Vatican; the Angel, similarly engaged, in pictures of the Annunciation by Melozzo da Forlì, Andrea del Sarto, Ferrari, Pollajuolo, Titian, Botticelli, Murillo, Dürer, Van Eyck and other old masters—no left-handed angels in any of these! Pope Sixtus is holding up his right hand in adoration, in the Sistine Madonna (Dresden). Everybody is familiar with the Gleaners, by Millet—several peasant women gathering stray grain with their right hands. Not one of the numerous angels by Fra Angelico, nor those painted by other artists, plays upon a stringed instrument with its left hand. Art is not well served when those who prepare biblical, historical or allegorical groups pose the models with the hands incorrectly placed. Also, there may be professional photographers who, when asked to photograph a pageant, or a group, may not notice any existing left-handed positions—the result of individual peculiarity or casual occurrence, if not so suggested by the director of the pageant. It may be that a well-informed and carefully observant photographer can avert incongruities that might eventually prove embarrassing to those who prepared the pageant or group.

The study of the history of costumes, from the time of the ancient Egyptians, Greeks and Romans down to the present, is exceedingly interesting and instructive. Nearly every comprehensive encyclopædia contains colored plates which illustrate correctly the various costumes of all peoples and periods, and most public libraries contain finely illustrated books on this subject. It is clearly to the photographer's advantage to possess ready and correct knowledge on any subject that may assist him in his business; and an intimate acquaintance with so popular a one as historical or religious pageants should appeal to him forcibly as being excellent subject-material for his professional skill.



ADVANCED COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value \$10.00.
Second Prize: Value \$5.00.
Third Prize: Value \$3.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already subscribers* will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes may be chosen by the winners, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, suitably engraved.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

All competition-pictures not returned are used to make up the PHOTO-ERA PICTURE EXHIBIT which is sent to schools, libraries, museums, camera clubs and to responsible organisations for exhibition-purposes, *free of cost*.

Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.
2. Not more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered into competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.
3. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. Prints may be mounted or unmounted.
4. Each print must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer, and printing-process. Enclose return-postage. Data-blanks sent at request.
5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he shall have received official recognition.
6. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces is sent with data. Criticism at request.
7. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.
8. Competitors who have won three first prizes within a twelve-month become ineligible to compete for prizes in this competition for two years thereafter.

Awards—Advanced Competition Subject—Table-Top Photography Closed April 30, 1925.

First Prize: L. J. Creegan.
Second Prize: Y. Morinaga.
Third Prize: Walter Rutherford.

Honorable Mention: S. H. Gottscho; Burton Slade, Jr.; Leo A. Reinke; J. Herbert Saunders; Alfons Weber; Herbert J. Harper; H. L. Thompson; Edward D. Mudge.



Subjects for Competition—1925

- "My Home." Closes January 31.
- "Miscellaneous." Closes February 28.
- "Indoor-Genres." Closes March 31.
- "Table-Top Photography." Closes April 30.
- "Artificial Light Photographs." Closes May 31.
- "Miscellaneous." Closes June 30.
- "Front-Cover Illustrations." Closes July 31.
- "Real Sunrise and Sunset Pictures." August 31.
- "Wild and Cultivated Trees." Closes September 30.
- "Miscellaneous." Closes October 31.
- "Lakes, Rivers and Brooks." Closes November 30.
- "Interesting People and Places." Closes Dec. 31.

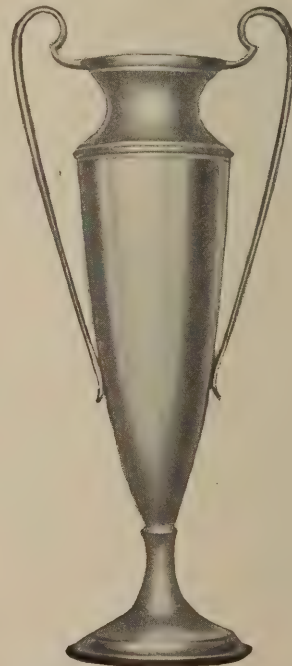


Photo-Era Prize-Cup



THE SPANISH GALLEON

L. J. CREEGAN

FIRST PRIZE—TABLE-TOP PHOTOGRAPHY



THE AWAKENING

Y. MORINAGA

SECOND PRIZE—TABLE-TOP PHOTOGRAPHY

Advanced Competition

THE top of a table is a convenient and necessary thing around the house. In a photographic contest it supports a variety of objects, from pseudo-interiors to art-gum nudes. "The Spanish Galleon", page 35, wins admiration by its excellent technique, good composition and imaginative qualities. A tale of old buccaneer-days is suggested by the old sea-chest, flintlock pistol and ancient chart. The artist did well to assemble such a telling group.

Data: Made with Ica camera, $3\frac{1}{4} \times 4\frac{1}{4}$; Carl Zeiss F/4.5 lens of $5\frac{1}{4}$ -inch focus, at F/16; exposed 2 minutes to light of one 400 Watt lamp. Five-times screen used. Panchromatic film; metol-hydro developer; enlarged on P. M. C. No. 8.

"The Awakening", this page, is an original bit and well illustrates the idea of spacing and spotting. The little figure might be in a dungeon, invoking heaven to release him from durance vile.

Data: Made at night by the light of a Kodascope with 56 Watt lamp, used as a spotlight. R. B. Graflex camera, 4×5 ; B. & L. Tessar, $8\frac{1}{2}$ -inch, at F/8; exposure 10 seconds on Par speed cut film, no screen. Elon-hydro-pyro developer; print on Vitava Rapid Black J. developing-paper.

"The Suppliant", page 37, is technically well done and decorative, but lacks a point of interest, as the flower-branches are shooting off at all angles. They kill the idea the artist had in mind when he named it. The suppliant is the thing least apparent to the observer.

Data: Daylight from small window; Eastman View Camera No. 2; Verito lens; $8\frac{3}{4}$ -inch focus; exposed 20 seconds at F/5.6, on Wratten Panchromatic Plate; pyro-soda developer; enlarged on Velour Black.

"The Print 'Hanging' Committee", page 38. A good enough group of its kind, and then again possibly not so "kind". Will they hang the prints or hang the photographers' reputations?

Data: Seneca View Camera, 5×7 , Series II Velostigmat, $8\frac{1}{4}$ -inch. Four seconds' exposure at F/6.3, on Eastman Super Speed film; Metol-Hydro developer; Vitava Etching Brown K.

This was an Honorable Mention print in a former competition.

E. H. WASHBURN.

Good ware easily finds a buyer.—*Plautus*.

Deliberate before you begin, then execute with vigor.—*Sallust*.



THE SUPPLIANT

WALTER RUTHERFORD

THIRD PRIZE—TABLE-TOP PHOTOGRAPHY

London Portrait-Studios

DEAR MR. BEARDSLEY: My trip from the North culminated in a two-week visit to London. The week originally allotted was extended to a longer stay because of the irresistible appeal of innumerable attractions. I was fortunate to be able to attend a session and a lecture at the annual congress of the Professional Photographers' Association of Great Britain, an account of which may be a feature of our London Letter by the Cadbys. This much, however, I will say, *viz.*, our American state-conventions could emulate with profit the character of these annual gatherings and their picture-exhibits. I was able to procure a few of the conspicuously meritorious prints. They will be available for publication in PHOTO-ERA MAGAZINE shortly.

London has her "Photographers' Row" in New Bond Street. But many of these portrait-studios (except Richard Speaight) offer free sittings, which really prove unprofitable except to the sitters, who accept and use these gift-pictures, and then cease to patronise the donors!

The studios of the master photographers are not all on one street, but are widely scattered, the famous Angus Basil, for instance, being situated in Tottenham Court Row—some distance from New Bond Street.

A visit to several of the leading portrait-studios was a revelation to me. I was impressed as much with the strikingly individual appearance of the studios—the approach, the reception-room and the studio proper of each—as with the artistic output. In fitting

up his or her place of activity, each studio-proprietor seems to have been influenced by the quaint old things with which this country is teeming. The entrance to the reception-room, also to the work-room and to the studio of one establishment—that of Dorothy Wilding, the leading woman-portraitist, in London, for instance—consists of plain, dark-stained double doors. Instead of a door-knob, there are two one-inch panels (about 6 x 3 inches) placed, one each, near the parting of the double-door. To open and enter, one has to push the lower part of the right-hand one to one side. The idea is simple and unique.

Mr. Marcus Adams' place was unlike that of any other. He specialises in children's portraits, *i.e.*, he photographs *no adults*, except, occasionally, the little ones in conjunction with the mother, and even then, he seeks to give dominance to the former. His "camera-room" is a marvel. Its approach is a glass-screen which is divided into small colored sections each representing an animal, a toy, or something pertaining to child-life. All about, and inside, are toys of every description; and the moment a little one beholds this vision, it is wild with delight, and is completely under the spell of this fairyland and its magician, Marcus Adams, whose artistic genius is expressed in pictures of delightful originality and captivating beauty. I believe that Marcus Adams is the only photographer in the world who confines his work exclusively to children, and who also finds it eminently remunerative.

Richard Speaight, another master-photographer, has his studio in New Bond Street, amidst its famous



THE PRINT "HANGING" COMMITTEE HERBERT J. HARPER

shops. He enjoys the patronage of the *élite*, and positively will make no free sittings—the bane of the profession in London. One enters his reception-room through a very long and narrow corridor, each side of which is filled with framed examples of his work. The receptionist enjoys the use of a spacious and very high room with an open stairway leading to the work-rooms. The place is unlike any other in the city.

It is the same with Angus Basil, whose patrons are everybody, but obviously of the most select. His camera-room, where the sittings are made, rejoices in heavy, black masses—similar to the character of his portraits, and the accessories are odd and of sombre hue. The artist himself—a tall man of stern and serious mien—gave me the impression of great reserve; but he soon revealed himself as a gentleman of charming qualities. He works entirely with the aid of arc-light and a very old portrait-lens (Petzval type) made ages ago in Philadelphia. Hence the fine, atmospheric quality in his work. As we parted—it was after five o'clock—he received, as a sitter, a blond, curly-headed little girl of divine beauty, accompanied by her mother. I noticed that the necessary *entente cordiale* between the towering artist and the baby was very quickly established, and that there could be no doubt as to the happy result of the sitting.

Bertram Park, the distinguished landscape-specialist, makes his headquarters in Marcus Adams' studio. Like the other master-photographers, he is quiet and reserved; but his refined personality and sunny disposition are quickly observed at the fitting time. Like F. J. Mortimer, the peerless marine-photographer, Mr. Park is in the enviable position to ask and to receive heavy fees for commissions. Consequently, he visits Southern France and Spain every year in response to requests to photograph the rarely beautiful scenery of those far-off countries. To meet these sterling artists in photography is a privilege which I appreciate fully. I only wish that there were more of that type in the United States than there are at present.

WILFRED A. FRENCH.

LONDON, May 22, 1925.

The Liberty Statue

APROPOS of a much-discussed topic, I was pleased to receive from a well-known pictorialist a photographic postcard of the Liberty Statue, New York Harbor, on which was the hand-written title, "Liberty Lighting the World". This is the way the famous statue was originally named. The title, "Liberty Enlightening the World", although much used, is incorrect.

W. A. F.



SUBJECT FOR NEXT COMPETITION

ADVANCED WORKERS



Advanced Competition—Real Sunrise and Sunset Pictures Closes August 31, 1925

WHEN this competition was suggested, there was some question in my mind with regard to how many of our readers would get up early enough in the morning to make a genuine sunrise picture. I was reminded of the remark purported to have been made by a man who was sentenced to be hanged at sunrise. When he was officially notified, he simply shrugged his shoulders and said, "I don't get up that early in the morning." Therefore, some of my readers may be of a similar mind, and real sunrise pictures ought not to be expected. On the other hand, there are those who welcome every

in Switzerland, from ships at sea, from a quiet farm in New England and across a mountain-lake; but I am frank to say that I have seen many more sunsets. However, the sunrises that I have seen were so wonderful that I doubt that any sunset could surpass them. There is something about the early morning freshness which is lacking at the close of day. To portray this early morning beauty is no small task; yet, what a delight, if one succeeds.

The close of day requires technical and artistic skill to catch, even with the modern rapid lenses and shutters. To me, the twilight has a tremendous appeal, and the picture on this page is, at best, lacking in that quality which tells the story convincingly. It is not included here as an outstanding example of



TWILIGHT-REFLECTIONS

A. H. BEARDSLEY

opportunity to tell how early they get up in the morning, how many miles they have walked before breakfast and how stupid it must be to lie in bed until seven o'clock, when half the day is gone. We have all met these good people. It now remains to be seen how many will produce real sunrise pictures for this competition to prove that they are early risers.

As for sunset pictures, there should be no great difficulty for all to participate. Very few of us go to bed before sunset. As to whether the early morning or the late afternoon is the more beautiful pictorially, I shall not attempt an answer. To my mind, each has a type of beauty or effect peculiar to itself. I would suggest that my readers decide this point for themselves and that they try to convince others by the pictures they have made, rather than by word of mouth, as to which is the best time of day.

Yes, I have seen many a sunrise from lofty peaks

pictorial prowess; but rather as a suggestion to those who may improve upon it when they have a similar opportunity during the vacation-season. Whether or not a twilight scene may be included as a sunset, I will not say; but I venture the hint that an exceptionally good twilight picture will not be dealt with harshly by the jury.

The subject of this competition is new for our readers and some may feel that it is beyond them. Let me assure those of faint heart that the technical and artistic requirements are no greater than those which have been necessary for previous competitions. But how to make these pictures? Well, if I were to offer suggestions, the pleasure of experimenting would be gone. Let me say that a little reading, a little thought and a little consultation with a good exposure-meter will open the way to success and a great deal of pleasure.

A. H. BEARDSLEY.



BEGINNERS' COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value \$5.00.

Second Prize: Value \$2.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already subscribers* will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes, chosen by the winner, will be awarded in photo-materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

Rules

1. This competition is open only to beginners, of limited experience with practical camera-activity, and whose work submitted here is without any practical help from friend or professional expert.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints and enlargements up to and including 8 x 10 inches.

4. Prints representing no more than *two* different subjects, for any one competition, and printed in any medium except blue-print, may be entered. Prints may be mounted or unmounted, as desired. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

5. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail.

6. Each print entered must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent at request. Criticism at request.

7. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he has received official recognition.

8. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with data.

9. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

Awards—Beginners' Competition

Subject—Miscellaneous

Closed April 30, 1925

First Prize: R. Morita.

Second Prize: Hakon Haug.

Honorable Mention: Paul L. Miller; Stanton G. Long; Moe R. Cheskis; Loyd Curbow; James Bell.

This Matter of Vacation-Photography

USUALLY the beginner makes his photographic début during his vacation-days. It is his first actual contact with practical photographic problems; and how he solves them will have an important bearing on his permanent interest in photography. Whatever may be said to the contrary, we all take greater interest in doing something successfully. We all like to obtain results—to accomplish that which we set out to do. If the beginner's purpose is to make worth-while pictures, he should make every effort to attain this objective. To be sure, he will have failures. Weather-conditions will thwart him and his inexperience may lead him to attempt the impossible. However, if the purpose of his vacation-photography is to do the best work possible, he is headed in the right direction.

The average "button-pusher" or snapshooter—and there are thousands of him—seems to care not at all that his pictures are out of focus, underexposed, poorly composed and pictorially worthless. He appears to be well pleased that there is anything at all to be made out on the negative or print. Many of us worked up through this class of camera-owners, and it required some time, thought and study to find ourselves in our true position. As soon as we realised that we did not merit the name of amateur photographer, we began to open our eyes and to understand the reason that our interest in photography was on the wane and that we obtained little pleasure or satisfaction in showing the results of our work to others.

Vacation-photography should not be considered of little importance, by beginner or pictorialist. Is it not rather the great opportunity of the year? Is it not the one time when there is leisure to make pictures and when all nature calls to the lover of the beautiful? Yet, behold the pictures which are usually made—pictures which have little permanent value and reflect no credit on the maker. Of course, on a camping-trip we must have a picture of the "crowd" in all sorts of groups, there must be the tents or camp, the campfire, beach and canoes; but why cannot these be photographed attractively and be technically well done? By so doing, nothing is lost and everything is gained. What if the group is composed of campers in old clothes—unshaven and unshorn—the composition is just as important as though they were all in full evening-dress. It should not be necessary for me to point out the exceptional opportunities there are for really beautiful pictures, even on a rough camping-trip. By all means make a few pictures of the "crowd", the tent, the pots and pans, the big fish and the canoe; but plan to include the beauty of the forest, the quiet stream, the glorious sunset, the pond-lilies and the pine-clad hills.



HAZY LIGHT

R. MORITA

FIRST PRIZE—BEGINNERS' COMPETITION

Beginners' Competition

Again, if the vacation-days be spent in more formal surroundings, there is still ample opportunity to feature the beautiful in landscape gardening, flowers, architecture and artificial lake. Then, too, at the large resorts, many interesting events will occur which offer the beginner the practice of making worth-while groups of notable people. In short, let me emphasise the value of looking for the subject which will live and always be of interest and pleasure. It is well in selecting a subject to say to oneself, "Is this the type of picture I could view with admiration if it were made by some one else?" It will help greatly to cultivate the ability to see with impartial eyes.

There is one point that I should like to make clear at this time. Vacation-photography should not be looked upon as permitting carelessness or a disregard for the rules which make good photography possible. Instead of being a time to let down, it should be a time of greater effort. For example, let us suppose that the beginner has planned a trip to Quebec or to the Pacific Coast. It is his first, and may be his last, opportunity to go. To be sure, it is a vacation-trip; but would he not be very foolish to make his picture-making a hit-or-miss effort instead of putting his very best into it? Rather, let him be careless or slipshod when he is at home, if he must waste time, money and material. However, I am persuaded that most of my readers are sincerely eager to make good pictures all the time. True, they have their failures and disappointments; but they keep right on trying very hard and soon begin to reap the reward of honest effort. Let this year mark a lessening of snapshotting and a greater increase in worth-while vacation-photography.

A. H. BEARDSLEY.

THE first prize picture in this month's Beginners' Competition, "Hazy Light", on this page, depicts an atmospheric condition often seen at early morning before the sun burns off the mist. Without the mist or haze to soften the uncompromising line of black-hulled steamships, this would have been just an ordinary snapshot. Here, however, there is just enough mystery introduced to give the imagination free play as to what they are, whence they came and whither going. Their masts and reflections of them serve to break up the skyline and water. The little motorboat is well placed, but a little too much to right, which can be helped by judicious trimming; about $\frac{1}{2}$ -inch from left. Then about an inch off the top to eliminate uninteresting empty space and balance the picture, and possibly a trifle from bottom.

Data: Graflex Camera $3\frac{1}{4} \times 4\frac{1}{4}$; Verito lens; exposure $1/70$ second at F/4 on Eastman Film Pack; enlarged on Portrait Bromide Paper.

"Winter Day", page 42, is a good example of linear perspective. We think horse and sleigh about in the right place, although a few feet nearer the camera would make it larger and a better center of interest. The focus is a bit too indefinite or soft for this class of subject. The contrast qualities, however, are fine and show correct exposure, developing and printing. No data. It may be of interest to add that this picture arrived from Molde, Norway, and that the maker is only eighteen years of age. Furthermore, we are now receiving entries from young people in many parts of the world, and we welcome them heartily; for with them lies the future of photography.

E. H. WASHBURN.



WINTER-DAY

HAKON HAUG

SECOND PRIZE—BEGINNERS' COMPETITION

The Case for Permanence

WE fear that the overwhelming popularity of development-papers for the production of photographic portraits is leading photographers to overlook the necessity, in certain circumstances, of providing a degree of permanence considerably greater than any silver-paper affords. It is by no means uncommon for a photographer to be asked to supply a portrait which is to be hung in, say, a municipal chamber or the board room of a great company, where it is destined to remain for a great many years. For such purposes as this, it should surely be a point of honor with the maker of the portrait to supply a print which can be guaranteed to remain unaltered for at least fifty years. The most ardent protagonist of development-papers will hesitate to say that any print on a silver-emulsion paper will be in its original perfect condition at the end of such period of time. A print fulfilling this obvious requirement needs to be either a platinum or a carbon; and it cannot be too widely thought among photographers that no other is suitable for the purpose. Price, as a rule, is a minor consideration in circumstances such as these, and in answer to the objection that the making of platinum or carbon prints is a branch of work no longer done in many studio-establishments, there is the fact that prints and enlargements of first-rate quality in these media are very readily obtainable from two firms.

Tarnished Bromides

ONE of the little jobs which every now and again is brought to a photographer's studio is the restoration of a bromide print or enlargement which has become tarnished with age, or rather by exposure to the air of rooms containing minute proportions of the fumes from gas-burners or closed-combustion stoves. Any print on development paper, however perfectly it may have been made, has a tendency to deterioration from this cause, and sometimes presents a very weather-beaten appearance, the tarnish taking the form of an iridescent bloom. But the effect is altogether superficial; the film of tarnish can be readily removed by rubbing with ordinary clean india-rubber. The use of rubber is rather a slow process if the print is of any considerable size, and a much more effective and rapid method is to employ a mildly abrasive preparation, such as the "Frictol" paste made by the Vanguard Manufacturing Company. A little of this, used on a pad of soft old cambric, will restore a tarnished print to its original appearance with a very few minutes' gentle rubbing. The restoration process may be carried a step further by giving the print a final rub with one or other of the lustre-giving or encaustic pastes. So restored, a print usually is thought by the customer to have been subjected to a process which is marvelous in its results.

The British Journal.



OUR CONTRIBUTING CRITICS



THE STRAY CAT

RALPH F. RHODES

THE PICTURE CRITICISED THIS MONTH

Whoever sends the best criticism (not over 200 words) before the last day of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE. The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

THERE are many commendable features about the print entitled "The Stray Cat". Care has been taken in focusing, and the exposure is well timed. Moreover, the effort is one of simplicity and unity. "But," you may say, "inasmuch as our attention is first drawn to the highlights, which in this case is the child, is not the title absurdly inharmonious with the spirit of the print?"

Not in my opinion. I will admit that the eye first falls upon the child. Yet, to me, the print is in harmony with the title, despite the seeming incongruity. The gaze of the child is so intently directed upon the homeless creature that the observer involuntarily looks upon the stray cat as the center of attraction. This is not said to the disparagement of the, indeed, charming baby; but in the picture we are led to feel as the child undoubtedly does—that the wandering animal is extremely interesting. The child's concentration of interest merely emphasises the presence of the visitor and, to me, completely justifies the title.

If you think the result would be more pleasing without the child, just cover up the right half of the

print. It is immediately evident that the picture would be robbed of the cheery appeal it now possesses. Incidentally, Mr. Rhodes has caught a happy study in expression. The child is entirely oblivious of the presence of the camera and has the mien of childish delight.

The most regrettable feature, I believe, has been the inclusion of too much uninteresting foreground, which is practically devoid of detail.

ARTHUR L. MARBLE.

I LIKE the picture "The Stray Cat", as it illustrates a kindly interest in one of our dumb friends which apparently has been left to its own resources by some moving householders.

To support the title, the little girl should be tempting the animal at a short distance holding the plate. The cat, being stray, would then be hesitant and frightened-looking. The cat in the picture appears domesticated and a title, "Feeding Time", seems to be more appropriate.

An improvement would be a new camera-location eliminating the window, which attracts too much interest, then having a new background of creepers, trimming the print a trifle top and bottom. The little girl's expression is exceptionally pleasing.

JAMES BELL.



THE ROAD TO SPRINGVALE

CHAS. A. PIERCE

YOUR CRITICISM IS INVITED

NOTWITHSTANDING its inability to arouse any considerable amount of enthusiasm from the standpoint of human interest or of pictorial endeavor, Mr. Rhodes' effort must be considered in the light of an achievement. The apparent simplicity of the subject is deceptive. Posing an animal is a task for an experienced worker, and the successful depiction of child-life demands the resources of an expert. When these two feats are harmoniously combined, we must acknowledge the result.

As we read the story, a stray cat in search for food wandered on the premises. The artist, ever alert for picture-material, saw his opportunity; he brought a pan of food and his camera, and, sure of childhood's interest—a mere joy in the wonder of things—placed the baby to give additional interest to the theme.

With an eye to tonal effect, he secured suitable backgrounds for his subjects of interest, and was highly favored in the illumination. And so, a pleasing record of a passing event was obtained.

However, the child, intended as an accessory feature, draws and holds our interest because of its rendition in a higher key, and for the reason that emotional expression is more attractive than mere animal gratification. Bisecting gives us two pictures, each complete, but of unequal interest.

Suggestively, we should advise a reconstruction, placing a cat, more attractive in color—photographically speaking—nearly in front of the child, which should be clad in garments more subdued in tone, and securing a background free of architectural details.

The author's technical ability is worthy of higher ideals, which would broaden his vision, and thus he would find material equal to his skill.

J. W. ADAIR.

PHOTOGRAPHIC quality excellent. The attitude of the cat is satisfactory and the spontaneous pose and expression of the child most pleasing. Notwithstanding, however, the commendable character of these important elements, the details of the picture do not come together quite as they should to make

an entirely satisfactory ensemble, in saying which I appreciate the fact that with subjects of the type we are considering, it is often very difficult if not impossible to get all the parts in ideal relation with one another. In this instance, the composition would be stronger if the child were a little nearer the cat. This would do away with the tendency to a division of interest between the two, now felt; besides giving the extra space that is needed between the child and the right-hand margin. The background, while contrasting nicely with the child's head and costume, might, with advantage, be made a trifle lighter in the vicinity of the cat. The cellar-window, though without doubt an additional detail, is not an improvement to the composition.

Although a matter apart from that of pictorial or technical merit, it seems as though the story-telling interest might have been increased by a more suggestive title, such as "Dinner for One" or "An Unexpected Treat".

WILLIAM S. DAVIS.

Take Your Time, Please

Attention, amateurs! Are not twenty-five good pictures preferable to forty which are no credit to the maker and which require explanations and excuses to account for their poor workmanship? In most cases, there is no need to hurry the making of a vacation-picture. Usually it is a landscape, a marine, an individual or a group that is to be photographed. Being on pleasure bent and free of business-cares, most members of the group can well afford the few extra moments to allow the beginner to make sure that all are included and that no heads, feet or arms are cut off in the picture through poor focusing or composition. When the fall and winter evenings arrive, and the vacation-days become a thing of the past, let the beginner take pride and pleasure in the photographic work which is contained in the photo-album before him. Let the snapshooter make excuses.



OUR ILLUSTRATIONS

WILFRED A. FRENCH



"The Spirit of West Point", our cover and frontispiece, is a fine piece of technical work. The composition, although very formal, is pleasing, and the young soldiers typify the spirit of defense, rather than offense, which is the fixed military policy of this nation. "Don't fire unless fired upon", was the command given the early patriots at Lexington on April 19, one hundred and fifty years ago, and those words appear to have prophesied the American attitude of mind, for all the years intervening, until the present. This picture is very appropriate to adorn the cover for July, especially so since President Coolidge has recommended July 4 to be National Defense Day. By it we are reminded of the spirit which made the original "glorious Fourth". These young soldiers appear duly prepared to do their duty, should necessity arise again.

The erect bearing of the true "West-Pointer" has been famous for many years and is well displayed here. A lighting was chosen which brings out the fine architectural features of the building into bold relief, suggesting strength and solidity. The lights and darks are well centralised in and about the portal.

Data: Made in fall of 1910 and shows Cadet Captain Lockwood, Class of 1911, in foreground. Time, 9.30 A.M., Eastman View Camera; Goerz Celor, Series B. No. 7 lens, 14-inch focus; Standard Orthonon plate used, on account of extremes of light and shade. Full exposure, and long complete development gave a negative suited to fairly soft printing-paper, Azo F, No. 2 being used.

The pictures of big game, reproduced on pages 5 and 6 by courtesy of the Century Company, display ocular proof of the thrill which comes to the big-game camera-hunter who has the nerve to do it. A false move may cause the speedy death of the hunter. Such superb examples as are here shown, although of chief interest to naturalists, can not fail to arouse the admiration of the camerist, who can readily appreciate the great difficulties to be overcome, which eliminated any possibility to make pictorial work. It may transpire, at some future period, when civilisation shall have covered even the now-termed remote parts of the earth, that all the generations then living will have to remind them of the mammoth creatures which exist in our day, will be such records as these, and museum specimens.

"Dawn and on the Move", page 8, is decidedly "different", as Miss Bell intended. The line of army wagons wending its way out of our sight, leaves us a sort of "au revoir" feeling. The white wagon-tops form a strong leading line which claims our interest. Data in article.

In "All Up for the Night", page 9, we feel we have caught up with the departing column on previous page, and they have prepared for shelter from the inclemency of the weather, if there should be any. The foreground tree relieves what would otherwise be a monotonous print. Data in article.

"Early Morning", page 10, finds things in preparation for another jaunt, even before the fog burns off, and we know the dew is heavy on that grassy foreground, as the dense fog blows between us and the

trees whose tops just show. Interest centers in the group on the bridge. Data in article.

"The Watering-Place", page 10, is another phase of the work attending the making ready for the day. The wise soldier knows the value of sufficient water in his horses' stomachs.

"Doing Kitchen Police", page 11, is an interesting little outdoor genre. It tells us about the means employed to prepare food for the hungry soldiers with keen, open-air appetites. Apparently a little visitor has come to camp, and the cook is explaining just how it is done. Data in article.

The subject of "Sulphite" still continues to be of interest. The print called Fig. 1, on page 15, serves to give point to Mr. Hall's article on the chemistry of sulphite.

"Leave Them Alone and They'll Come Home Wagging Their Tails Behind Them", page 17, is another proof of Mr. Wendell's skill with his camera, if such were needed. The lights and darks are well massed, and the highlight on the sheep's backs attracts and holds attention. We can well imagine their little stubby tails wagging, as they scurry along. No data.

"Dr. E. L'H. McGinnis", page 19, is a splendid specimen of Dr. Kilmer's skill as a portraitist of high rank. The reader is referred to obituary notice, in back part of this issue.

The print of fraternity-house, on page 20, "looks like a jail", to quote the one who made it, and is a record only, and not very satisfactory, even as a record. So deserted and forbidding, it looks! In Fig. 2, page 21, what a transformation! The whole atmosphere is one of beauty, refinement and invitation. These two prints show proof of the vision of the cameraman, who saw his failure, acknowledged it and achieved ultimate success. Data in article.

The fascination of cave-exploration is many-sided. Floyd Collins lost his life trying to bring new beauties to the attention of the world. The scientist finds joy in the rock-sculpture. The beautiful forms of rock-flora urge a man of Mr. Neville's skill in photography to record their wonderful forms, for the benefit of others. How well he has succeeded is amply demonstrated by the beautiful prints illustrating his entertaining story.

On page 23 we are shown a marvelous formation in "The Banana-Stalk". Who could imagine such beauty existing in dark bowels of the earth, never to receive any light, save that which man, in his tireless search for new beauties, should bring in the form of flashlight or electric torch? In "Large Gypsum-Flower", we perceive another form. Here, we are reminded of the so-called ice-flowers which form under certain conditions in winter, on the surface of natural ice. We also recall the beauty of frost on the window-pane. Nature, in three distinct ways here mentioned (and probably others), produces works closely resembling each other—all of never-failing delight to those who really "have eyes to see". Thoreau, in his "Journal", describes the beauty of the "ice-rosettes" or "leaf-crystals", which were of great purity and delicacy. A skilled nature-photographer, Mr. Gleason, has

recorded these in a way impossible to Thoreau, and has published a book illustrating many of Thoreau's choice and uniquely lucid descriptions of nature.

On pages 24 and 25 we are delighted with further variations of the cave wonders, no less beautiful than those previously shown. In all of these we find the field for stereo-photography, to give us the third dimension. There are no data, but Mr. Neville makes the following comments. "The Banana-Stalk: a unique and characteristic clump of helictites, similar to stalactites and stalagmites. Gypsum Flowers and designs. Acres of this sort of dazzling, sparkling, white gypsum, in all sorts of curious patterns and designs". Of those on pages 24 and 25, he says, "Passage ways for thousands of feet are lined with these" (helictites) "on both sides and on ceilings. All manner of spraggly, contorted masses are found. The very large and beautiful gypsum flower" (page 25) "is about 18 inches long and sticks out from the wall a foot or more."

In "At the Shrine of Buddha", page 29, we have an example of decorative photography on a tabletop. It somewhat resembles a Japanese screen, is good technically and worth another try.

Data: Auto-Graflex, 4 x 5, Bausch & Lomb Tessar f.c. lens; 6½-inch focus; exposure 10 minutes, by light of 200 Watt lamp on Super Speed cut film; printed on Azo No. 1.

"Samples of the China-Closet", page 31; a fairly well arranged group of old chinaware; very set and formal. The vase of roses is decidedly out of value, as all but one or two appear black. A panchromatic plate with suitable color-screen would have rendered all tones in better harmony.

Data: January, 10 A.M.; 4 feet from window; 4 x 5 Graflex, 8¾-inch Verito lens, at F/6; one second on Film-pack; M. Q. developer; enlarged on P. M. C. No. 9.

"Photographic Crossword Puzzle", page 32, is a novelty, surely. Mr. Ludlum is a versatile photographer.

ERNEST H. WASHBURN.

Judgment in Exposure

EXPERIENCE teaches, they say, in exposure as in other things. Yes; but not unless we have some reliable means of forming an estimate. Experience will suffice for any given set of conditions which do not vary beyond certain limits; but it is asking too much that it shall teach us how to expose correctly under all conditions of time, place, subject, lighting, and material.

Being prudent, therefore, we seek the aid of one or another method of estimation: we measure the light-value with an actinometer, which is provided with a piece of sensitive paper which darkens to a standard tint, or with what may be called an extinction-meter, through which we look at the subject, gradually cutting off the light passing until we can no longer see through it at all; or we deduce the exposure from a calculator.

But (and it is a big "but") we must not look upon such instruments as an end in themselves, but rather as a means of education towards perfecting our own judgment of the exposure necessary.

Many able photographers rely only upon their judgment, without reference to any form of meter or table, even for the most difficult subjects. How has such desirable knowledge been acquired? Perhaps the following conversation will serve as an illustration.

Two "old hands" were discussing the merits and demerits of an exposure-meter.

"With an exposure-meter," said one, "and a little intelligence, anyone can expose correctly."

"Yes," said the other, "but with a little more intelligence, the meter could be dispensed with. No meter can tell me what result I am aiming at!"

A good, if paradoxical, piece of advice is to "carry an exposure-meter, but to learn to use it as little as possible by using it, in the early stages, as much as possible, intelligently." A useful mental calculation is to estimate, approximately, the proportion of open sky-area to be seen from the position of the principal subject, and to increase the exposure as this proportion of the possible total decreases. It is mainly from this area that our subject will derive its illumination; and therefore the larger the area of sky which is visible from it, the shorter must be the exposure.

The value of any light-reflecting surfaces present must be taken into consideration; as also, of course, must the luminosity of the sky itself, or any direct sunlight. This consideration, when practised frequently, becomes habitual, and forms a very reliable basis of light-estimation.

If we are to get the best possible result in a negative, we must not look upon "correct exposure" as being too elastic a term, in spite of the "enormous latitude" claimed for some materials. This will be evident if we refer to the subject-scale of an exposure table.

Let us suppose, for example, that we wish to emulate a certain exhibitor, and photograph a black cat on a post, with a cloudy sky in the background. Let us further assume that "latitude" of our plate or film is 8 (i.e., that eight times the "correct minimum" exposure will not unduly over-expose). Reference to the A.P. and P. exposure table will show that if the sky requires 1-100th of a second, the cat will require 1-3d of a second; and as these are "minimum correct" exposures, we must not compromise. We must give the cat 1-3d second or lose quality; but by doing so, we shall be calling upon the plate or film to have a latitude of 33, or about four times its normal latitude, and the chances are that we should lose the clouds!

But we don't want to lose the clouds; we would rather lose some of the cat! Very well, we *do* compromise. We give it 1-12th of a second, and if we get a printable cat and a printable sky we may congratulate ourselves, and the makers of the plate or film. If we fail, our remarks, at least, will be "printable", knowing the cause of our failure. We might, indeed, be tempted to try again with panchromatics, and a suitable filter, and expose for the cat!

Latitude in a sensitive emulsion is a most desirable quality, and, for general work, we should not sacrifice this for any other feature; because it not only gives us a working margin of exposure for any subject, but actually extends the range of light intensities which we are able to include, without the mathematical exactitudes which might otherwise make photography into a science rather than, as it is, an ideal hobby.

W. A. CROSS in *The Amateur Photographer*.

Eugene P. Henry

MR. EUGENE P. HENRY, by birth a Frenchman, but long a resident of these United States, passed from our midst, suddenly, on Sunday evening, May 31, 1925, while enjoying the company of some of his many friends. He was a man of courtly, charming manners, a photographer of rare, artistic ability, a member of the Department of Photography of the Brooklyn Institute, also of the Pictorial Photographers of America, and other societies, and a contributor to salons and exhibitions in this country and abroad, where his work was welcomed.

MYERS R. JONES, Chairman.



ON THE GROUNDGLASS

WILFRED A. FRENCH



Help Your Dealer

"MIND your own business!" is a trite and, in certain circumstances, a good bit of advice. It's an ill-natured retort to a well-meant suggestion made to some one in whom one takes an interest. It much depends on who the person is to whom the kindly advice is offered, and *how it is presented*. It is needless to say how this may be done.

The photo-dealer who treats you honorably, faithfully and well, deserves your personal support. You recommend him to your friends; you endorse him. If, therefore, you know any way by which he can improve his business—suggesting some article of merchandise he ought to add to his stock, or some desirable means of publicity, approach him tactfully and, if the idea is a good one, you may be sure that it will be appreciated and gratefully accepted. Or, perhaps, there may be an opportunity for adverse criticism—a salesman may have a shortcoming that seems to call for correction; the store may be untidy, or the counters and goods on display may have gathered dust. If brought to his attention, in a kindly, friendly way, such matters will receive prompt attention. Some dealers leave a clock in front of their store, or inside. It is neglected and gives the wrong time of day by a wide margin. Such a timepiece is worse than useless. It is a source of annoyance to the customer. In a humorous, inoffensive way, the matter can be brought to the dealer's attention. If wise, he will have the offending clock regulated and kept telling the truth, or have it hooded and rendered harmless.

I have known a dealer to display a large clock in his store. It was not dependable. One day, it was about ten minutes slow. The consequence was that a customer—this was before he owned an automobile—having made his purchases, glanced at the clock and left hurriedly to "catch the five o'clock train for Sackville". He arrived at the station too late and—missed the train! In consequence, he changed his dealer. The dealer got rid of the clock, but the customer never came back.

The friendly, observant amateur photographer, if he wishes, can benefit his dealer; for there is hardly one who is perfect and whose store or methods could not be improved. Then, too, few dealers find time to read photo-magazines, even trade-journals, and a bit of criticism, constructive or otherwise, contained in one of them, might never come to his attention.

At the Pyro Club

THE publisher of the *Photographic Record*, a new member, was peeved. Some one had twitted him about an oversight in the last number of his paper.

It seems that once upon a time he had had invented, and printed in his paper, a really capital joke. Everybody in the camera club had read and enjoyed it. Some months afterwards a thoughtful business-friend saw it in the funny column of the *Boston Transcript*, but without any mention as to its source. Appreciating the photographic nature of the joke, he clipped it,

pasted it on a sheet of paper, wrote after it the source—*Boston Transcript*—and mailed it to his friend, the publisher of the *Photographic Record*. Needing a small filler, one day, our journalist hastily selected the clipping from a lot of others, measured it and, without reading it, sent it to the printer. It was not until he appeared at the monthly meeting of the Pyro Club, a month later, that friendly fellow-members called his attention to the fact that he had published his own precious joke for the second time, and had credited it to another paper! No wonder that he was peeved.

The Ignorant Public

IT is a deplorable fact that most members of the general public—*i.e.*, the average person—do not recognise a good thing when they see it. Individual appreciation of excellence is rare, nowadays. Consequently it will not do for photographic workers to try to profit by this unfortunate condition. Although there are very many persons that visit an exhibition of photographic prints who are unable to appreciate the artistic qualities of a carefully composed photograph, and other excellences, there are many others that are critical observers and instantly recognise the artistic intent of the exhibitor—the noble theme, its fine interpretation and skilful execution. And they are not slow to speak of these things to their friends and give praise where it is deserved.

On the other hand, these same critical visitors cannot fail to notice a print in which a glaring error in composition has been committed. If accompanied by friends, these discerning observers may draw attention to this defect and comment upon it at the same time—wondering, perhaps, whether the exhibitor was conscious of this shortcoming, and hoped that it might pass unnoticed. Well; it might and it might not. It is well to be conscientious, at all times, even in apparently so small a matter as making a photographic print. Some workers, who are not sure of the merit of their prints, submit them for private criticism to friends who are competent critics, and abide by their opinion. The exhibitor is lucky who has such friends.



Difficult to Smile in the Circumstances

JOCK MACPHERSON had been to the photographer's to have his likeness committed to paper. When he got his proofs, he showed them to his pal, Sandy.

Sandy looked at them in silence for a moment and his expression showed that he was not altogether charmed with what he saw.

"Dinna ye like it?" asked Jock anxiously.

"Ay; but it seems a peety ye couldna ha'e smiled when the mon was takin' ye," replied Sandy, slowly.

"Ay, mon," said Jock sadly, "but I couldna verra well when they photies were costing me twel' shillin's the dizzen!"—Exchange.

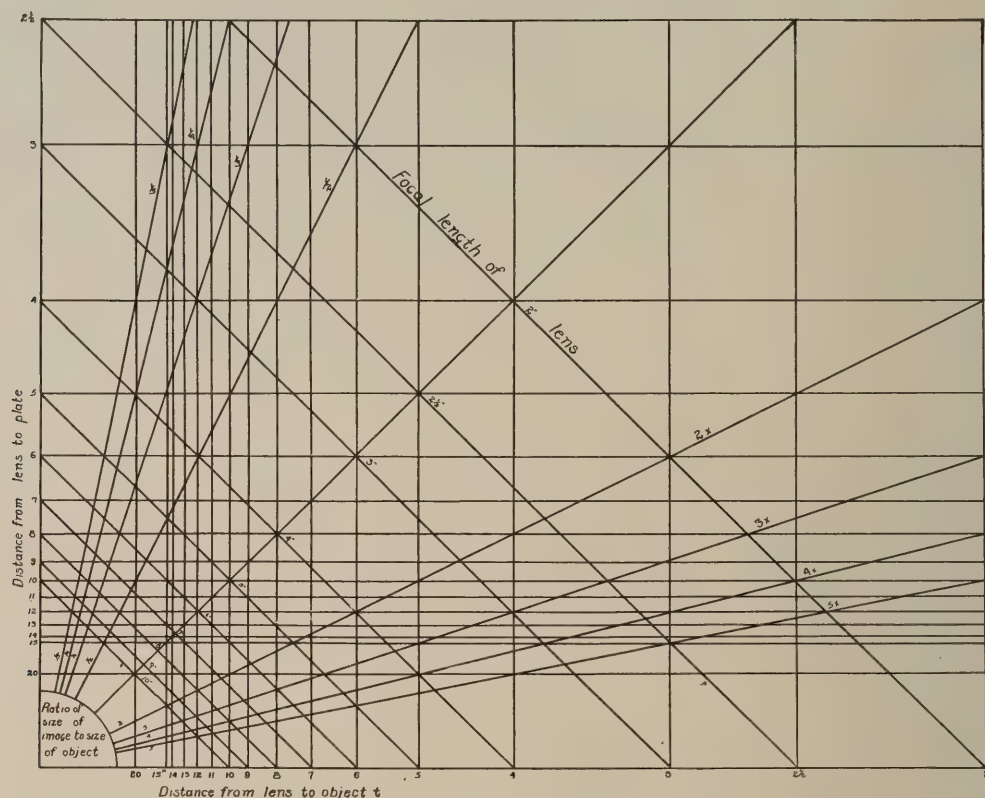


FIGURE 1

HERBERT C. MCKAY

A Copying-Scale

MANY amateurs help to defray expenses incidental to their hobby by doing odd jobs of industrial work; and it often happens that the jobs they get are those which the local photographer has turned down or tried to do and failed. It is not seldom that the amateur is asked to do some copying to a definite scale, and when such is the case, there usually ensues a wild chase after optical formulæ or a long and tedious trial-and-error search, with much measuring upon the focusing-screen.

A friend of mine often does such work, and in his workroom I found the scale described here. I was deeply interested and asked permission to present it to the readers of this magazine, which permission was readily granted. Much as I should like to do so, I cannot lay claim to having originated this very useful chart.

In the chart illustrated herewith, the data for lenses from two-inches to ten-inches focal length is given. It will be noticed that there are four factors involved, two constants, the ratio desired and the focal length of

the lens, both known and two unknown values, the two distances from the lens to the object and to the focusing-screen respectively. An example will show the use of the chart.

Let us suppose that we have a camera fitted with a lens of three-inch focus and wish to make a copy one-third the size of the original. Running down the series of parallel diagonal lines we find one labelled $3''$. All formulæ for the three-inch lens will be given by points falling in this line. This line is traced to the left until it intersects the line labelled $\frac{1}{3}$. This point is also the intersection of two other lines. The horizontal line is traced to the left and we find that the lens is to be set four inches from the plate. Beginning again at our point and following the vertical line to the bottom, we find that the object is to be situated twelve inches from the lens. Therefore, if we fulfil these conditions, we shall obtain the desired scale.

So far so good. I have found that many graphs, tables and other quick-reference computations are entirely suited to my purpose, so that in order to make this chart as useful as possible I shall describe its con-

struction so that a chart may be made for any desired series of lenses.

The vertical and horizontal scales are made first. It will be noticed that the diagonal indicating one to one equal size, extends from the lower left corner at an angle of forty-five degrees. Hence from the point of intersection, the vertical and horizontal lines of a given value are of equal length. In other words, the lines for, let us say, six inches, or the graphic lines for copying equal size with a three-inch lens, form a perfect square in the lower left corner. Thus the graph is a rectangle with equal sides. Now for copying one half size, it will be noticed that the lines forming the graph enclose a rectangle whose longer sides are twice the length of the shorter; for example, with a four-inch lens, the lens is six inches from the plate and twelve from the object. It will be seen that for any formulæ the graph is a rectangle whose sides are in proportion to the degree of enlargement or reduction. It will also be noticed that all of the graphs upon the chart have the base and left side in common, but the right side and top are variable.

The first step is to locate the base line and the left side line. Now take any convenient unit of length, according to the size of chart desired. One hundred of these units will be your working-basis. Your chart will not have a base line one hundred units long unless you wish to include lenses of one-inch focal length. For a minimum focal length of four inches, your base line will be twenty-five units long, and so forth. The intersection of the base line and the left side will be the measuring point. To determine the various distances, divide one hundred by the focal length and measure the result from the measuring-point, both along the base and along the vertical side. Thus for the four-inch lens, $100/4 = 25$. Measure twenty-five units on both lines from the measuring-point, and draw lines from these points perpendicular to the base and fixed side. These last lines will enclose the extreme limits for all lenses of four inches or greater focal length. Now locate the succeeding units in the same manner, five, six, seven and on up. The farther this scale is carried, the nearer you will approach infinity. For purposes of illustration, suppose that this is carried to twenty. On a small chart the lines between fifteen and twenty will be so close, that sixteen, seventeen, eighteen and nineteen will be omitted. (See chart illustrated.)

This completes the graphs proper. The next step is to insert the proportion indicators. Find the two points at which, let us say, six and twelve intersect. Draw a line from the measuring-point and through this intersection, extending to the limits of the chart. One of these lines will be the one-half size indicator, the other the two times indicator. Then locate the intersections of three and nine. These will give the one-third and three times indicators and so forth. Any desired indicators can be inserted in this method.

The final step is to insert the focal-length indicators. Draw a line diagonally connecting the points marked "Four" on both scales. Then draw similar lines connecting each pair of like numbers. These lines will be indicators for lenses of their respective focal lengths. For a single-lens chart, four inch for example, only one diagonal is drawn, that is connecting the two "Fours."

Now, using the chart illustrated, suppose that in using a five-inch lens, you wished to make a photograph five times original size. Following the five-inch line to the five-times indicator, the point is found to be approximately one third the distance between "20" and the base line, whose value is one hundred, and the lens will be six inches from the object. As one factor is not given, we find the need of a chart which ranges from five to fifty instead of from two to twenty. Thus

it will be seen that for specific problems, appropriate changes must be made in the chart; but the chart once made for existing circumstances, will soon make itself an invaluable item of laboratory-equipment.

HERBERT C. MCKAY.

Diagram Lantern-Slides by Reversal

THIS title relates to the making of lantern-transparencies or slides in the camera by means of a negative exposure. This is accomplished quite easily and with certainty by using plates very thinly coated with a sensitive emulsion, especially when the vehicle is not gelatine. There is one plate procurable which answers these requirements, *viz.*, Paget half-tone plate.

Represented in the makers' lists as being of speed H. and D. 90, this plate corresponds fairly closely to a gelatine process plate, and its sensitiveness is quite sufficient for use with half-watt electric lamps.

A developer giving good results is that prescribed for the plates, namely, a hydroquinone and caustic soda formula. The developed negative that is intended for reversal must have full density and the lines must be quite free of deposit or fog. Being thinly coated these plates are very quickly washed, and this washing must embrace both film-side and glass-side of plate, as the contamination of the reversing-solution with the developer will upset the process.

After being well washed, back and front, the negative is immersed in a mixture of the following solutions:—

A. Potass. permanganate.....	60 grs.
Water.....	10 ozs.
B. Sulphuric acid.....	1 oz.
Water.....	10 ozs.

These are mixed in equal parts, and the mixture used at once.

The negative having been immersed in this mixture, daylight or strong electric light may be introduced. After about five minutes' immersion the plate is removed and washed, back and front, then immersed in the original developer, where it remains in the rays of electric lamp or in daylight, if available. The reversed image then quickly develops, and when full density has been attained the plate is again washed and fixed in clean, fresh hypo (2 ozs. to 20 ozs. of water).

The reversing-solution must be mixed just as it is required. It will not act satisfactorily unless it is quite fresh; in fact, it will not act at all at the end of fifteen minutes from mixing.

Unless the negative has the white portions of the diagram represented by opaqueness, and the lines by absence of deposit, the reversed positive will not be satisfactory.

A rapid application of Farmer's reducer will clear away any fog from short exposure or development.

W. T. WILKINSON in *The British Journal*.

HERE is a suggestion that may be of some help to PHOTO-ERA readers, if you care to publish it in some corner of your magazine. Most readers of your magazine who develop their own prints, I believe, know that potassium iodide added to the developer will prevent abrasion marks on prints; but like myself do not possess a pair of scales to weigh out the amount desired, $\frac{1}{8}$ grain to the working ounce of developer or 1 grain to 8 ounce of developer, just the amount of an Eastman M. Q. tube. A novel way of weighing out this one grain, is to go to any drug store and purchase a number of one grain capsules. When needed the capsule can be emptied into the developer.

PAUL L. MILLER.



THE STEREPHOTOGRAPHER



Stereoscopic Portraiture

STEREOSCOPIC portraiture is one branch of that fascinating hobby, about which we hear little. It should not be neglected, for the stereo-portrait is as great an improvement over the ordinary one-lens portrait, as the stereo-view is over an ordinary landscape-photograph.

Some stereo-workers, no doubt, have been kept from practising portraiture, because of the focusing limitations of their instruments which do not permit focusing within nine or possibly six feet of the camera. The portrait I allude to is real portraiture, head and shoulders, or just head. A three-quarters length or full length at six or ten feet is good; but the close-up is even better.

Where the one-lens portraitist is deterred from making close-ups because of the distortion and bad perspective, the stereo-worker has nothing to fear as the stereoscopic vision in the viewing-instrument will take care of all that.

The writer is not a portraitist by any stretch of imagination. In fact, about ten per cent. of his work can be counted fair; but once in a while he catches a victim in sunlight, in the early morning or late afternoon, when the sun is fairly low, and makes a sunlight "portrait". These snaps he considers much better than anything he could obtain with a Graflex, whatever the lighting used. The three prints which I enclose are offered as encouragement to any stereo-worker who has never tried close-up portrait-work, and as horrible examples to those who have done really good stereo-portraiture. No claims are advanced as to the merits from an artistic standpoint, as regards pose, lighting or background.

An Advantage of Stereo-Photography

ONE great advantage of stereoscopic photography, is that one may follow this hobby every day and any place, especially places near at hand and about the home. A collection of prints made with an ordinary camera of the familiar spots in the home-town, or near home, will soon become uninteresting; but the reproduction of such views with a stereo-camera will give prints that will seem real and retain their interest.

For an example—personal but I hope pardonable—I lived for about two years in a small town in western Texas, very uninteresting and nothing of the picturesque about the town itself. The character of the surrounding country was interesting; but not beautiful. On a hill overlooking the town, a rich man from a nearby city built himself a home, in fact three of them before he finished, and spent much money beautifying the grounds, which covered the hilltop and sides, including probably twenty acres.

It was in this town that I first became interested in stereophotography. But, at first, I decided the lack of interesting places to photograph. That was before I had finished the first batch of negatives and prints. After seeing my first stereo-print, I knew that there was enough material waiting to be photographed in my immediate vicinity, to keep me busy as long as I might remain there. It did, and I missed many really

good things, because I spent the time photographing those nearest and easiest to obtain.

One bit of landscape was always pleasing to the eye, as I went past; but a snap with an ordinary camera failed to obtain a picture of any interest. The stereo accomplished this, where the other camera failed. So on with the other pictures made on the private grounds already mentioned. None of great interest as a single picture; but they hold the attention when viewed stereoscopically. An avowed pictorialist would probably pick out parts of the landscape and park views to make a real "picture"; but I rely on the stereoscopic positive to give me the realistic representation. It is much easier.

I have said a great deal without quoting the moral or excuse for it all. It is simply this—though every stereo-enthusiast already knows it—that the stereo-camera will make commonplace views interesting and lifelike, where the one-lens camera fails. I hope to influence some amateurs, readers of PHOTO-ERA MAGAZINE, who may have been wavering, to enter the branch of photography which will be certain to give greater enjoyment in the end.

CHARLES FRANCIS HAMILTON.

Photographic Portraiture and Painting

EDITOR PHOTO-ERA MAGAZINE:

Referring to articles by Mr. Rudolf Eickemeyer and in the *New York Times*, I would like to remind Mr. Eickemeyer of the "Ives Parallax Stereogram". This invention can produce portraits which are made with two lenses, are life sized, and of full stereoscopic effect. There is no cumbersome device necessary to view them properly. The plasticity is overawingly perfect. No painted portrait can possibly compete with it and yet, strange to say, very few people seem to want a portrait of this sort of themselves, or of their beloved ones. Dr. Herbert E. Ives, son of the inventor, Frederick E. Ives, told me not long ago, "New inventions which require the capacity to see hardly ever succeed, for the average person cannot use his eyes".

As to the difference of the painted or photographed portrait, this brings up the old question, "is photography an art?" I settled this question to my own satisfaction as follows: Is painting an art—is sculpture? Are speaking, singing, dancing etc. arts in themselves? They are but means of expression and become an art only when a competent artist is using them to express himself. So with photography—if a master portraitist will use the camera instead of the palette, to produce a portrait, he will achieve a work of art.

True enough photography does not handle colors as a painter, nor does it make as durable pictures as paints do. But these two are the only handicaps of photography in overtaking and subduing portrait-painting altogether. There seems to be little hope of ever overcoming the color-handicap. The capacity of the human eye of counter-acting all local colors and, so to say, to create a complementary net of colors over and between all colors it sees, will hardly ever be matched by any mechanical device. Until then, no color-photographer can achieve the same results that the painter does.

NICHOLAS HÁZ.



THE AMATEUR KINEMATOGRAPHER

HERBERT C. MCKAY



Some Real News!

WELL, my kinematographers, I have real news this month. There is an organisation of kinematographers in this country and one which is doing real good in a very quiet and retiring manner. This is the Ciné Club of America. Headquarters may be addressed at H. P. Station, Detroit, Michigan.

This club is rather unusual in its objects and its methods of organisation. The primary object seems to be to place the sixteen millimeter camera in the hands of those persons who could not afford to purchase the necessary equipment—and it is rather expensive just at present. Its method is to make it possible for any group of persons, numbering ten or more, to form a club which is affiliated with the parent organisation. The maximum membership of any one club is twenty. Any number of clubs may be formed in any city or neighborhood. It appears that the idea is to provide units small enough to use one camera. The cost of an outfit divided among so many would be small indeed, per individual.

The fees are, I understand, one dollar per year for the local club and one dollar per year for the headquarters-organisation. Furthermore, each club must make and present to headquarters one film which shall comply with certain specified requirements as regards subject, scenes, footage, titles and so forth. In this connection, members are classified "C", "B" and "A". Class "C" are beginners, "B" more advanced, while Class "A" are those who may be truly called amateur kinematographers. (When will we learn that an amateur is one who has more or less expert knowledge and enthusiasm for his hobby?) The Ciné Club of America correctly calls their highest class, "Amateurs".

The first, or class "C" picture shall have as its subject the home-city or neighborhood of the club. This is a very good point. It will result in widespread knowledge of our country, and as the leaders of this club so aptly say, "The Ciné Club of America will make it possible for the slogan, 'See America First' to be realised by the mass of the population instead of being limited to those who can see the country from the Pullman".

These films will be placed at the disposal of the affiliated clubs without charge. In short, the club is doing its utmost to bring the pleasure of ciné work within the reach of everyone; and, so far, it has adopted excellent methods to gain its goal.

Recently, I have noticed a tendency for the technical journal, in all lines, to become more and more technical. This is appreciated by a few highly advanced and strictly professional workers in various fields; but in every field which has, like photography, a wide amateur and a wider beginner following, there must be a journal devoted to the interests of these workers. A few days ago this struck me forcibly while reading a photographic publication, and that same day I received a letter from the Ciné Club of America which stated that there was nothing published for the beginner in kinematography. I then decided that it was up to me to set my own house in order before criticising my neighbors. With this in view, I wish to announce that very shortly we shall begin to carry a series of brief discussions of the beginner and his troubles.

I make this announcement in order that those of you who wish to do so, may send suggestions as to the topics which should be treated. Tell of those points which have given you trouble. If you have made any discoveries, tell us those also. These articles will not have any commercial or professional matter in them at all. They will be for the exclusive benefit of those who are beginning in the gentle art of kinematography, and in the course of time, as this army grows and advances, we shall endeavor to keep pace.

In this department, we try to adhere closely to the established policy of PHOTO-ERA MAGAZINE. That is we wish to give the utmost possible benefit to the beginner, and we wish to give that which is the most in demand from our readers.

We hope that this series will be started in a very early number, but this will of course depend to some extent upon the difficulties encountered in preparing the material. However, it will begin soon, and then we and the kiné-beginners are going to pull together for better kinematography.

The interest in sub-standard work steadily increases and it is daily more apparent that finally the vision of advertising and commercial motion-pictures is to be realised in a thoroughly practical manner. More and more manufacturers and salesmen are showing interest in this work, and there are many private persons who have had films made for perpetuating family-scenes.

The Kinematograph and Education

ONE of the directions in which amateur kinematography is likely to receive its greatest development is in the use which can be made of it for educational purposes. For example, at the Teachers' Conference recently held at Oxford, demonstrations were given by Major Cartwright at the Friends' Meeting House which were very attractive, as many as two hundred fifty teachers attending at one time. In this case a small model of the home and educational type of kinematograph was used; and machines of the same kind have recently been installed at the Leeds University, Denstone College, Stoke, Bembridge School, Isle of Wight, and the Preparatory School, Carlisle. This type of machine was also demonstrated before the principal education authorities in East Lancashire by the Reverend Viscount Mountmorres; and another example of its use is given by the Government Schools of Equitation, where it is installed.

The Amateur Photographer.

New Subjects for Home-Movies

MESSRS. W. BUTCHER & SONS, LTD., advise us that they have recently added to their film-library some important adaptations from English classics, including *The School for Scandal*, *Daniel Deronda*, *Hard Cash*, *The Channings*, *Lorna Doone*, and *In Old Alsace*. Two films of special interest have for their subject a hunting pageant and the manufacture of a Mazda lamp.

Lord Glentanar, on a recent yachting-trip, took a complete amateur kinematograph outfit.

The Amateur Photographer.



THE MILITARY PHOTOGRAPHER

CAPTAIN A. H. BEARDSLEY, SIGNAL—RES.



Aerial Photography at Pope Field

AN important but little heard of aerial photographic activity is going on at Pope Field, Fort Bragg, N.C. The Field Artillery Board are trying to reduce the use of aerial photographs, to compute firing-data, to such a practical basis that it may be incorporated in the Field Artillery Training Regulations. The aerial photographic end of this investigation is being handled by Lieut. Edmund C. Lynch, A.S. and three enlisted men sent here from Langley Field. Major Faulkner Heard is the member of the Field Artillery Board who is handling the actual use of the photographs in firing-problems.

The photographs are made by Lieut. Lynch, prints made, and data as to the scale and orientation inked on the print before it is turned over to the Board. Major Heard computes the firing-data and fires a problem to see what accuracy could be obtained. Several problems were fired in order to strike an average.

The investigation began with the use of a single photograph which showed two panels, one representing a reference-point, visible from the observation-post on the ground, the other representing a target, assumed invisible from the observation-post. These panels had been accurately located by surveying-methods so that the accuracy of the photographs could be checked. The scale was determined by making photographs of a base-line, assumed to be behind our front lines, before flying out over the range to photograph the panels. Orientation was a more difficult problem, as the panels were assumed to be in unknown territory. The most accurate means of orienting was by means of the "Baldwin Solar Chart", which gives the angle between the line of shadow and true north when the time, date, latitude and longitude are known. In firing the problem, the gun was adjusted on the reference-point by ground-methods and then shifted to the target by means of the data obtained from the photograph. Only one gun was used, but the group of shots fell so close to the target that it would have been destroyed had an entire battery been used.

The second step in the investigation was the use of a mosaic strip and a mosaic. They were assembled very accurately. No attention was paid to matching the topography, the photographs being assembled using their centers and ground-control. However, no ground-control was used beyond a line assumed as the battle-front. The presence of a large number of control-points made it easy to tie the mosaic together. It also made a strong foundation for the grid which was placed on the mosaic and strip. The mosaic, since it was gridded, was used like a map in computing the firing-data. That is, the range and deflection were not only scaled off, but they were also computed from the co-ordinates, as scaled from the mosaic.

At present the Tri-lens camera is being used to work out a series of problems of a more complicated nature. There has only been one problem fired from these photographs, as yet. The results so far have shown that the Field Artillery is no longer helpless when the target is invisible and no maps are available. The Air Service takes on a new relation with an arm that now uses aerial observation as a matter of course.

No means are available at present to accurately

and speedily determine the elevation of the target, particularly when only one or two photographs are made of the target-area. Nevertheless, in time of war, using this means of computing the initial firing-data, the first shots should be close enough to target to enable the aerial observer to locate the shots of his battery without trouble. It will go quite a way to make Field Artillery firing faster and more accurate.

This Matter of Military Photography

PERHAPS some of our readers do not quite understand the reason that this department was made a part of PHOTO-ERA MAGAZINE. Well, let me try to state my position. At the outset, let me say that it is through no desire to be instrumental in stirring up another war. Let us hope fervently that there never will be another one. Neither is it because of a desire to fill up space. Frankly, it is for the simple reason that through military photography as now practised in the U. S. Army and U. S. Navy we can all learn of cameras, lenses, processes and methods which are often far more accurate than those used in ordinary industrial or pictorial photography. By that I mean, that in military photography there must be an attention to detail and an excellence of technical ability which is not often required in civilian photography. Take for example the applications of airplane photography to surveying, mapping and exploration. Witness the exceptional work of such Army officers as Lieut. A. W. Stevens whose photographs are truly marvelous and of great scientific value. In fact, today the U. S. Army Air Service is rendering remarkable service to the entire country. All this effort is not for war-purposes but for the development of the country and to help us all to know more of this great land of ours. Other nations are adopting similar methods.

Another reason for this department is to take a stand squarely on National Defense and the present policy which places protection and maintenance of law and order fairly on the shoulders of every American citizen. If this country is good enough to live in, it is worth guarding against all the agencies which would destroy it, from the inside as well as from the outside. This does not mean carrying a chip on our shoulders or picking a quarrel but rather an organised establishment which can function efficiently in times of internal or external stress. In short, the American citizen who stands ready to uphold the Constitution of the United States and the liberties which it gives to every one of us is the man who realises his responsibilities and is the citizen who makes this country great.

A third reason for this department is that in military photography—for those who enter the Army—there is a splendid opportunity for advancement. Moreover, after this military training the young man can return to civilian life with a profession which he has thoroughly mastered and in which he has received a training usually far in advance of civilian schools. For in the Army he must learn; but in civilian schools he can often graduate or not, as he pleases.

In conclusion, PHOTO-ERA MAGAZINE is widely read in the U. S. Army and U. S. Navy by officers and enlisted men who appreciate this department and what it stands for.



LONDON LETTER

CARINE AND WILL CADBY



SARGENT, the great American painter is dead. Here, we have grown to look on him as an Englishman; for he has been among us and in close touch with the world of art on this side of the water for many years. It has been said that in those extraordinarily vivid and true records of landscape, mostly executed during holidays, Sargent showed no designing skill, and that they were as unselective as a photographic snapshot. Nature is accepted just as she presented herself, without rearrangement of the incidents to fit the rules of conventional picture-making. But a closer study of these apparently haphazard studies reveals that everything is in its right place, balance is perfect; and that it was either a case of art concealing art or he found his design in Nature instead of imposing it on her. The latter proposition is a cheering one for photographers who are, to so great an extent, tied down to recording the actual facts that face the camera; and, if there is truth in the first suggestion, we may take heart in the knowledge that even in photography, art can conceal art by seizing on the incidents of lighting to subdue or accentuate certain planes.

Sargent, like most Americans, was an indefatigable worker, and at the height of his popularity it was no uncommon thing for him to undertake three sittings in a day. All the world is familiar with his marvelous portraits, some of which seem, to onlookers, to reveal secret characteristics of his sitters. Once, on being interrogated on this point, he dismissed the subject somewhat curtly by saying: "I chronicle, I do not judge."

"I can't stand professional photography and I refuse to go," was the downright answer we received from a friend we were persuading to join us at the Exhibition of the Professional Photographers' Association just now being held in London. In the end, however, he consented, and we were able to enjoy his amazement at the standard now reached by British professional work. He was caught at the very beginning by Angus Basil. "But this has not been done by a professional," he said, pointing to a fine genre-study, a photogravure on limp Japanese paper. We called his attention to the legend attached to the print:—"Executed for Messrs. Pears Soap". "A Portrait" by J. Campbell Harper, "Mrs. D." by Arthur H. Davis, and "Teresa" by W. Fisk Moore took most of the wind out of his sails, and when we reached some landscapes, notably "Durham—An Impression" by Octavius C. Wilmot, a fine piece of imaginative work, and "The Enchanted Wood" by Harold Ranson, we were leading round a tame and converted appreciator of professional work. In fact, he agreed with the Associate Editor of PHOTO-ERA MAGAZINE, who had also visited the exhibition while in London, that there is not much wrong with British Professional Photography, for he said that it holds its own well with that seen at any modern convention in the U.S.A. Indeed, it is well worth while for the Professional Photographers' Association to organise such an exhibition in the very heart of London and in the month of shows, when all the country people come to town to see the year's art.

The Professional Photographers' Association is at present holding its Congress in London which was opened on May 11 with a reception given by the

President and Mrs. Raines, the cheery and informal atmosphere of which ensured a delightful evening. Each day there were lectures, demonstrations and meetings; but on Wednesday a real holiday spirit prevailed. To begin with, it was our first true summer-day, when a dreary, gloomy spell that had lasted all the year was at last broken by a burst of brilliant sunshine and radiant weather-conditions. It was also the day the members of the Convention had been invited to Messrs. Houghtons' big Walthamstow photographic works. This outing proved one of the most popular of the week, and many members took advantage of Messrs. Houghtons' hospitality and came back filled with enthusiasm at their reception and entertainment.

As we have said before, this is the month of shows in London. For most of the public, the Royal Academy leads the way; even although it is much disparaged by the highbrows of modern art, it attracts a bigger public than all the other shows put together and still carries much weight. But paintings are not our business, and we hasten on to record that the rooms of the Royal Photographic Society are housing two separate exhibitions. On the lower floor Miss Kate Smith shows a set of her own particular subjects, elfin, woodland, nymphish, and not very serious. Above, in the big gallery, is the Overseas Exhibition, an intensely interesting show which merits far more space than we are able to give here. It strikes us at once, coming from Miss Smith's feminine, charming but a little vague collection, what a masculine and virulent spirit there is in these pictures from Africa, Australia, Canada and other countries. They demonstrate that individual schools of photographic thought are being evolved in various corners of the Empire, strongly influenced no doubt by environment. And as time goes on, they are likely to develop more marked characteristics of their own.

We have grown to look on the readers of PHOTO-ERA MAGAZINE as a large united and mutually interested family, and when one of the mainstays of the journal finds its way to Europe, it is only natural to record our view of the occasion, or rather the few hours the Associate Editor and his wife spent with us.

And so, on the platform of our little local station down in Kent, we met the man with whom we had been in touch for twelve years but had never seen; and with him came his charming wife whose reputation had preceded her. We were strangers to each other for perhaps just one second; and, after that one informative look, we found ourselves chatting like old and intimate friends. It was amusing that our first words should have to do with the craft that had brought us together, for the immediate need of our guests was to buy a roll of film to record the fruit-blossoms that just now are such a marked feature of this district.

The day was one of England's best; a May day on which the sun shone uninterruptedly, lighting up the delicate green foliage and turning the masses of broom and gorse into veritable fire. After lunch we visited Ightham Moat, a show-place of the neighborhood, dating back to Plantagenet times. Mr. French told us the date of the Moat House before we entered, and very soon he was telling us and the guide all about its

treasures, exactly where such and such a picture had come from and to which schools they belonged, translating Latin and French inscriptions, and explaining everything; the guide, meanwhile, being content to take a back seat and allow Mr. French to do everything but accept the tips! But the most charming episode of the day occurred at tea. A cuckoo started its loud call in a tree in our garden. Immediately, our friends both rushed to the open door, and looking around with all the spontaneity and vie of youth exclaimed, "And was that a real cuckoo?" And then, just as if to satisfy their lively interest in new experiences, the somewhat unwieldy bird flew across the scene.

The Associate Editor and Mrs. French seem to us to have met an astonishing number of charming people. We were continually hearing of delightful conduct and pleasant sayings by our own country-folk. We were almost succumbing to the seductive illusion that these isles bred a strangely attractive race. However, we realised, in time, that it was simply the atmosphere which Mr. and Mrs. French carried with them. They radiate good will and courtesy, and naturally even we phlegmatic British people cannot fail to respond. It must make traveling very pleasant.



BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices. Send for our list of approved books.

STALKING BIG GAME WITH A CAMERA, by Marius Maxwell. 311 pages, 77 photographic illustrations, Appendix and Index. Price, decorated cloth-cover, \$9.00. New York and London: The Century Company.

The lover of nature and of the camera will find a rare treat in store for him when he begins to read Mr. Maxwell's fascinating account of his photographic experiences in Equatorial Africa. The combination of important nature-lore and photographic data arouses new enthusiasm for natural history and the manipulation of the camera.

In this issue we are quoting the chapter, "A Camera-Huntsman's Equipment" and reproducing two of the exceptional illustrations with which Mr. Maxwell's book is filled. We believe that our readers will profit by the practical advice and suggestions given, because a number of them may be applied to photographing big game in the United States and Canada.

The volume opens with a preface by Sir Sidney F. Harnes, K.B.E., Sc.D., V.P.R.S., Director of the Natural History Museum, London, England, and this is followed by an excellent introduction by the author. Then, in interesting sequence, come the following chapters: "A Camera-Huntsman's Equipment", "First Visit to British East Africa", "With Camera After Elephants in Bush-Country", "Camera-Sport With Elephants on the Amala and Mogor Rivers", "The Senses of the African Elephant", "Camera-Incidents With the Masai Giraffe", "Camera-Sport with Buffalo and Rhinoceros", "Further Experiences with Rhinoc-

eros Bicornis", "Camera-Sport with the Hippopotamus", "On Safari to the Northern Frontier District", "Wild Elephants and the Camera at Abbas Wen", and "With Camera After Elephants in the Lorian Swamp". Two appendixes, one on elephants and the other on the primeval man and the pleistocene elephants completes a book which holds the reader's attention from cover to cover.

Mr. Maxwell's style is pleasing and the many anecdotes with which the text is filled add greatly to the reader's pleasure and to his understanding of the difficulties which confronted the author. The typography and illustrations are admirably done. The volume is an addition to any library-table. We believe that our readers will find much pleasure and profit in a careful reading of "Stalking Big Game With a Camera".

THE ART OF THE PITTI PALACE; with a Short History of the Building of the Palace, and its Owners, and an appreciation of its Treasures. By Julia de Wolf Addison. Illustrated. Decorative Covers. 389 pages; Complete Index. Price, \$3.00. The Page Company, publishers, Boston, Mass.

"Florence and the Pitti Palace!" These are words that stir the emotions of the impressionable tourist. You cross the Arno over the Ponte Vecchio and soon arrive at the Pitti Palace. Once within the walls of this wonderful palace consecrated to art, you lose yourself in admiration, for nearly every picture is by a master whose name is a household-word. Every room is spacious and well-lighted, and, unbidden, you wander back to the rooms you first entered and gaze anew at pictures you have known since childhood. Well, you make up your mind that one day does not suffice, and so you return the next day, even though you may sacrifice a visit to this or that church or monastery.

The charm of this treasure-house is delightfully presented by Julia de Wolf Addison, a sincere lover of art, a sound critic and an engaging writer. She leads you irresistibly from the Hall of Venus, glorified by Tintoretto's Marriage of Venus and Vulcan with Cupid; Titian's St. Catherine; his Bella; Salvator Rosa's two great marine-views, and works by other great masters—into the Hall of Apollo, adorned with Raphael's portraits of Angelo Doni and Maddalena Doni; Murillo's Madonna and Child; Titian's Magdalen and portrait of Pietro Aretino; Fra Bartolommeo's Pieta; Rembrandt's self-portrait, and numerous other pictures of lesser fame.

Thence you are enticed into the Hall of Mars. Here Rubens shines by reason of his Mars preparing for War; his Four Philosophers and St. Francis. Many art-lovers, however, prefer Raphael's portrait of Pope Julius II; Cigoli's Ecce Homo; Titian's portrait of Howard, Duke of Norfolk; Allori's Judith with the Head of Holofernes; Guido Reni's Rebecca at the Well; Andrea del Sarto's Holy Family; Bordone's Repose in Egypt, and works by other masters.

You then proceed into the Hall of Jupiter, which boasts the possession of Paolo Veronese's Three Marias, and his Jesus taking leave of his Mother; Salvator Rosa's two war-scenes; Andrea del Sarto's Annunciation—the most prominent of the collection.

The adjoining Hall of Saturn rejoices in the presence of more popular pictures, viz., Raphael's Madonna of the Chair (della Sedia), Madonna del Granduca, Madonna del Baldacchino, and Vision of Ezekiel; Perugino's Deposition; Del Sarto's Disputa, and Giorgione's Nymph and Satyr, accompanied by works of other artists.

In the Hall of the Iliad, hang Giorgione's famous Concerto (Concert); Rubens' Holy Family; Del Sarto's Assumption of the Virgin, and Biliverti's Tobias and the Angel, as outstanding masterpieces. In the Stanze of Prometheus, Ulysses and della Stufa are mural paintings and easel-pictures by Cortona, Rosselli, Lippi, Botticelli and numerous other artists.

The author gives the history and many interesting details of each important picture, also of the artists, and imparts to the book the combined charm of critical analysis, narrative and portrayal.

W. A. F.

As You Hike It!

KODAK, Kodak as you go—
Matters not where heading;
Everywhere before your eyes—
Scenes of beauty spreading;
Every turning in the road,
Every mead and valley,
Every hill and mountain peak—
Yours—to take and tally!

Kodak, Kodak as you go—
Let not scenes remind you
Of that Kodak left at home
Many miles behind you.
Take a Kodak when you go!
Never once forsake it;
Pictures wait on every hand—
Take it, take it, take it!

WILLIAM LUDLUM.

Get Your Name into Print

THOSE readers and subscribers who solve the entire photographic cross-word puzzle by William Ludlum, on page 32, will have their names printed in the first available issue. If our readers would like some more photographic cross-word puzzles, Mr. Ludlum has kindly offered to prepare them.



COMING EXHIBITIONS



AUGUST 29 to SEPTEMBER 26, 1925. The Second Midland Salon of Photography to be held in the Art Gallery, Birmingham, England. All particulars and entry-forms may be obtained from the Honorable Secretary, Capt. F. C. T. Hadley, Houndsfield, Hollywood, Birmingham.

SEPTEMBER 14 to SATURDAY, OCTOBER 24 1925. Seventieth Annual Exhibition of the Royal Photographic Society of Great Britain, 35 Russell Square, London W.C. 1, England. Last day for receiving prints Friday, August 14. We have entry-forms and shall be glad to mail them as long as they last, to any readers who will send two cents in stamps for postage.

NOVEMBER 1, 1925. New Zealand Photographic Salon, Dunedin, under the auspices of the Arts Committee of the New Zealand and South Seas International Exhibition, 1925-26. The Salon will be housed in a specially equipped building. Last day for receiving prints, October 15, 1925. Entry-forms may be obtained from the High Commissioner for New Zealand, 413-5 Strand, London W.C. 2, England, or from H. M. British Trade Commissioner, 285 Beaver Hall Hill, Montreal, Canada. We have a few entry-forms which we shall be glad to send to any of our readers.



THE PICTURE-MARKET



There is a market for every good photograph. The amateur and the professional photographer have the opportunity to sell good pictures and to derive financial benefits from their camera-work. To make this department accurate and reliable we have requested and obtained the hearty co-operation of the editors. We make no claim to publish a complete list of the market, each month; but the names of magazines that appear below we know to be reliable and in the market for photographs at the time of going to press. We have obtained our information direct from the editors themselves.

New York Times, Mid-Week Pictorial, and Wide World Photo Service, 229 West 43d St., New York City, N.Y. Charles M. Graves, Art Editor. Wants news photographs. Size unimportant. Glossy prints desired. As little descriptive matter as possible wanted. Pays for accepted prints; New York Times, \$10; Mid-Week Pictorial, \$5 per print; Wide World Photos, \$3 per print, on acceptance.

House and Garden, 19 West 44th St., New York City, N.Y. Heyworth Campbell, Art Editor. Wants photographs of houses, interiors and gardens. Size 5 x 8, glossy. Needs about twenty-five words of descriptive matter. Write the magazine as to its requirements before submitting prints. Pays \$3 to \$5 each print, on acceptance.

American Farming, 537 South Dearborn St., Chicago. Paul Stephens, Art Editor. Wants agricultural photographs. Size, 5 x 7 inches. Cover pictures, 10 x 12 inches. Glossy prints wanted. A good story will help sell the picture. Stories must be current. Better write the editor before submitting pictures. Pays from 50 cents to \$15, on bills rendered. Editor writes: "We do not want freaks. Pictures must exemplify good agricultural or domestic economic practices. Farm machinery (tractors, threshers, etc.) can be secured from the manufacturers, and good roads pictures from cement associations, free."

The Farm Journal, 230 South Seventh St., Philadelphia. Charles P. Shoffer, Art Editor. Wants story-telling photographs. The photographs needed for The Farm Journal must be interesting, amusing, or tell a definite story. Any size. Cover pictures should be 15 x 20 inches. Glossy prints preferred. Enough description should accompany the picture to accurately describe it. Pays from \$1 to \$3 for ordinary pictures, and \$30 to \$50 for covers; on acceptance.

The World's Work, Garden City, N.Y. R. T. Townsend, Art Editor. Wants pictures of people prominent in the news. Size 8 x 10, glossy. Enough descriptive matter to serve in writing short captions. Write the Editor regarding the requirements of the magazine before submitting pictures. Pays \$1 to \$3 for pictures, on acceptance.

The Farmer, 59 East 10th St., St. Paul, Minn. Berry H. Akers, Art Editor. Wants human interest pictures pertaining exclusively to farm life and farm scenes adapted to the Northwest. Any size. Cover pictures 5 x 7, or in that proportion. Glossy prints wanted. Enough descriptive matter for a caption needed. Price paid depends on the print.

The American Hatter, 1225 Broadway, New York City, N.Y. E. Hubbard, Art Editor. Wants photographs of window displays, store interiors having an idea in the equipment or merchandising of hats. Pays \$2 if acceptable.



HERE, THERE AND EVERYWHERE

To ensure publication, announcements and reports should be sent in not later than the 5th of the preceding month.



Pittsburgh Salon Elects Officers

At our regular Spring Meeting, the following officers were elected: president, O. C. Reiter; vice-president, N. S. Woolridge; print-director, S. A. Martin; lantern-slide director, Benjamin J. Robinson; secretary and treasurer, P. F. Squier; and executive committee, C. E. Beeson, F. O. Van Gorder, W. C. Mellor, O. C. Reiter, and P. F. Squier.

The Thirteenth Annual Pittsburgh Salon will be held in the spring of 1926, this time being from about the middle of March to the middle of April, instead of during the month of March as heretofore. Entry-forms will be mailed about October 1 and entries will close the early part of February.

P. F. SQUIER, *Secretary*.

Elysian Camera Club, Hoboken, New Jersey

THE Elysian Camera Club, 307 Washington Street, Hoboken, N.J., held its regular monthly meeting and election of officers for the coming year on Thursday evening, May 14. The following officers were elected by acclamation: Richard Reynolds, president; Charles Westerburg, vice-president; George Sting, treasurer and corresponding secretary and Paul Eickhorn, recording secretary.

The club calls the attention of amateur and professional photographer to the fact that it is the only photographic society in Hudson County, New Jersey. We offer a welcome to all who visit us, as well as to members of other clubs.

GEORGE STING, *Corresponding Secretary*.

Brooklyn Institute, Department of Photography

THE Department of Photography of the Brooklyn Institute closed its active season with several interesting exhibitions. Miss Sophie L. Lauffer's class in pictorial photography exhibited its work the week of April 27. The pictures in this exhibition—representing thirty-eight exhibitors—showed examples of all the pictorial processes from bromide to hand-coated platinum and presented a harmonious set of prints which quite justified Miss Lauffer's pride in the results obtained. Her classes planned to end their session with an outing in beautiful Westchester on Sunday, June 7.

William H. Zerbe's classes held their annual exhibition of work done by his students during the season. The prints shown were of a high standard and Mr. Zerbe considered the average quality better than any of his previous class-exhibits. Mr. Zerbe has always been particularly successful in getting his pupils to try the different processes such as Carbro, Gum, and Kallitype, and among promising newcomers who showed work in these were noted Messrs. Albers and Biscardi. Mr. Zerbe's classes ended their season with an outing at Woodland, Westchester County, on May 24.

At the annual meeting of the Department, these officers were elected for the coming year: president, J. W. Aughiltree; vice-president, Sophie L. Lauffer; secretary, A. Merrell Powers; treasurer, J. Halstead

Patterson; Chairman of the Executive Committee, Wm. Elbert Macnaughtan; and vice-chairman, Myers R. Jones.

The Thirty-fifth Annual Exhibition of work of the members of the department was held the week of May 11 and brought out some interesting work by recent members of the department, as well as work of the customary excellence by the older members. Those represented were: William A. Alcock (5), J. W. Aughiltree (3), J. Milton Bergen (2), Thomas Blake, Jr. (2), Mary E. Callaghan (3), Chas. W. Case (2), H. Richardson Cremer (4), George Hamilton Dean (2), Vernon E. Duroe (5), Eugene P. Henry (3), Antoinette B. Hervey (3), Ethel W. Hill (1), Ida Mae Jennie (2), Myers R. Jones (4), Joseph Kraysler (3), Sophie L. Lauffer (6), Wm. Elbert Macnaughtan (3), F. B. McCabe (2), Wm. D. McClure (2), C. W. Miller (2), W. N. Misuraca (2), Harry A. Neuman (4), Edward Ostrom, Jr. (2), Walter E. Owen (5), J. Halstead Patterson (1), Leo Pokras (2), Otto C. Semonsen (2), Samuel P. Ward (2).

MYERS R. JONES, *Vice-Chairman*.

Dr. E. L'H. McGinnis

EDWARD L'HOMMEDIEU MCGINNIS is dead. On April 28 peacefully, quietly and painlessly, the soul of my old chum, friend and neighbor passed into the Life Eternal. Stricken by apoplexy when in perfect health and in the midst of his medical and photographic activities, Ted McGinnis breathed his last in a beautiful room in St. Luke's Hospital, the place to which he had given many years of his life. Dr. McGinnis had two slight strokes of apoplexy; one on April 25 and another the following day. He was a bachelor and resided at 202 West 86th Street, New York City, where he had lived for over twenty-five years. He was stricken at his home, and on April 27 was removed to St. Luke's Hospital.

Dr. McGinnis was born in the South, on January 18, 1862. He spent most of his life in New York, but had traveled extensively. He made a memorable cruise on the "Yampa" and his book, "The Cruise of the Yampa" was widely read. He was well known as one of our foremost Electro-Therapeutists and had been greatly interested in cancer research. Some ten years ago he took up photography as a hobby, becoming so proficient that his work became known both here and abroad. He was a great believer in the small $2\frac{1}{4} \times 2\frac{1}{4}$ camera and soft-focus projected prints on chloride paper. Although he resided in New York City most of the time, he always claimed his residence at Southold, Long Island, where his home "The Little Grey House" is one of the show-places of the county. His radio-station is a model and was one of the first to be erected in the vicinity; the pole used was formerly the mast of the noted yacht "Vigilant", which beat the British boat "Valkyrie". Dr. McGinnis was a member of many clubs and medical societies and did much for the little hospital at Greenport, Long Island.

Dr. McGinnis' great charm lay in the almost instantaneous way he had of making friends, and the friendships always lasted. One could not help liking the

genial, happy, smiling face that was always Ted's. As one of his best and closest friends, I feel his death to be a personal and irreparable loss. I cannot close this short sketch of my old chum without a little piece of poetry he often quoted, which showed his own nature to a marked degree:

"It don't pay to do much talking when you're mad enough to choke,
'Cause the word that cuts the deepest is the word that's never spoke.
Let the *other* fellow wrangle and when the clouds have passed away,
Then he'll do a heap of thinking of the words you didn't say."

Such, then, was the life of Ted McGinnis—good, dear old Ted. Yes, he has gone, but the spirit of his example can never be erased.

T. W. KILMER.

Twelve Pictures to Win Around-the-World-Trip

An amateur photographic contest which offers a trip around the world is not conducted very often. For this reason we urge our readers to read this reference and then write immediately for further details to the Charles A. Mann Realty Corporation, Board of Award, Suite 1001, 505 Fifth Avenue, New York City, or Sorrento, Maine. Moreover, a second trip around the world is offered for an essay, and any contestant may participate in both contests. One trip will be awarded for the best twelve amateur photographs made at Sorrento (near Bar Harbor), Maine; and the other trip will be awarded for the best essay or descriptive article about Sorrento, Maine. Truly, the prizes are worth more than an ordinary effort. Here are the conditions which govern both contests:

AMATEUR PHOTOGRAPHIC CONTEST

Conditions.

Consideration and due weight will be accorded to the selection of subjects photographed and the points of concentration, as well as the lights and shadows reflected in the pictures and the technical skill displayed by the camera-operator.

Only photographs by amateurs will be considered, but contestants will not be required to do their own printing and developing.

Each contestant to submit twelve pictures—no more and no less—with his or her name, address and occupation plainly printed on the back of each picture.

Each participant in this Amateur Photographic Contest must register in person his or her full name, address and occupation with our Sorrento representative at the time of making the photographs.

Contest closes November 15, 1925.

ESSAY-CONTEST

Conditions.

Consideration and due weight will be accorded to vividness and descriptive force, graphic presentations of luring aspects, conciseness and completeness, as well as literary style displayed by the author.

Each Essay must be typewritten and signed with full name and address of its author.

Participants in the Essay-Contest will not be required to visit Sorrento, although as many as can possibly do so should avail themselves of the first opportunity, and a visit is almost sure to furnish an inspiration. Versatile, indeed, is the one who can adequately

portray the attractions of this delightful spot without a personal inspection.

Contestants visiting Sorrento should promptly register their names and addresses with the local representative.

Contest closes November 15, 1925.

The judges who constitute the board of award are too well known for our readers to question this contest in the slightest degree. They are: His Excellency, the Governor of the State of Maine, The Attorney General of the State of Maine, The President of the University of Maine, General Manager of the Bangor (Maine) *Daily Commercial*, Business Manager of Bangor (Maine) *Daily News*, *Photographic Experts from Eastman Kodak Co., Rochester, N.Y., and Camera Craft Studio, Inc., New York City.

The trip around the world will be made on the Cunard Cruising Liner "Franconia", 20,000 tons register, sailing from New York, January 12, 1926, and returning to New York about May 21, 1926. It will be nearly a five-months cruise *de luxe* under the personal direction of Thos. Cook and Son.

Sorrento (near Bar Harbor) Maine, one of the world's most charming summer resorts, judged by its diversity of nature's lavish gifts, high above sea-level and sloping gradually toward the shore, is situated upon an irregular peninsula—jutting out from the mainland at Sullivan—about four miles in length and an average width of about two miles, with an exquisitely picturesque shore-frontage of about ten miles on Frenchman's Bay, Flanders Bay, Sorrento Harbor and East Point Harbor, safely sheltering small craft, yet, deep enough to accommodate battleships which often visit these waters.

We take this opportunity to express the wish that some reader of PHOTO-ERA MAGAZINE will win the coveted prize and that next winter, when we are facing freezing weather in New England, the fortunate reader will be enjoying the delightful winter-climate of the Far East.

Central Canada Exhibition to Have Photo-Competition

A SPECIAL feature of the Central Canada Exhibition to be held at Ottawa, Canada, August 22 to 29, 1925, will be the Amateur Photographic Competition for which handsome silver and bronze medals are offered. Further particulars may be obtained from the Central Canada Exhibition Company, City Hall, Ottawa, or from W. H. C. Carriere, Citizen Building, Ottawa. Mr. Carriere is president of the Ottawa Camera Club and will appreciate the hearty co-operation of our readers in making this competition and exhibition a success.

Beautiful Photo-Coloring by J. D. Hunting

ALMOST at the very foot of the famous White Mountains of New Hampshire, at North Conway, there is an exceptional photographic establishment known as the Hunting Studio. There, many of the most beautiful pictures of White Mountain scenery ever made may be obtained, from postcards to magnificent enlargements. Specimens of Mr. Hunting's work have already graced the pages of PHOTO-ERA MAGAZINE and more are to follow. Our readers know the remarkable beauty and artistic excellence of these pictures. Recently, Mr. Hunting, who is also a painter with long

*The Photographic Experts will not serve in connection with the Essay-Contest.

European training, has evolved a remarkably beautiful method of coloring his pictures. After examining a number of these, we urge our readers, who may visit the White Mountains this summer, to make a special effort to call at the Hunting Studio at North Conway and rejoice with us that the magnificent scenery of this region is being reproduced so beautifully by a man who has put his heart and soul into the task.

Dr. T. W. Kilmer Exceptionally Honored

RECENTLY Dr. T. W. Kilmer held a one-man show of forty 11 x 14 multiple-gum prints under the auspices of the Photographic Club of Baltimore City. The highest award and greatest recognition which this club can bestow under its constitution is the Label of Merit. It is given to single prints only, and not to sets as a whole. After careful deliberation at a private showing, a precedent was set without one objection. Every one of Dr. Kilmer's prints, singly, were awarded the Label of Merit. So far, members of the club have received this award only for prints already shown at salons. Very few outside exhibitors have ever received the Label of Merit on their prints. For these reasons we extend our hearty congratulations to Dr. Kilmer and may he continue to receive pictorial honors from clubs of the standing and excellence of the Photographic Club of Baltimore City.

Hand Coloring of Photographs Simplified

WE are glad to call the attention of our readers to a course in the coloring of photographs which is now being given by the Japanese Water Color Company, Peerless Building, Diamond Place, Rochester, New York. We receive many letters during the year with regard to methods of coloring with watercolors and oils. The course given by this old and well-known company will be under the personal supervision of Charles F. Nicholson who originated the now famous Peerless colors and who is himself an artist of ability. A very attractive booklet, with one hand-colored illustration, gives complete information with regard to the subject-matter and cost of this course. We have investigated the plan of study and we know Mr. Nicholson personally. We are confident that every effort will be made to serve each student well. The booklet, "The Art of Hand Coloring Simplified," will be mailed to any reader of PHOTO-ERA MAGAZINE who will write for it and mention this magazine.

The Teaching of Shadow-Art and Dancing

FOR some months we have been in touch with an organisation which is endeavoring to combine a well-established school of æsthetic dancing with a school of pictorial photography. The efforts of those interested have borne fruit and a definite course has been outlined and is now offered. Briefly, those who attend the Master Shadow-Art School of Photography, 15 West 16th Street, Indianapolis, Ind., will have the benefit of trained models who will be supplied from the Summer School Classes of the Mlle. Theo Hewes School of Dancing, together with the personal services of Mlle. Theo Hewes. Obviously, the pictorial opportunities are exceptional, especially when it is known that these classes will be held on some of the most beautiful private estates in Indiana.

The pictorial photographic school will be under the personal direction of Hillary G. Bailey, whose photo-

graphic work has appeared in *Theatre Magazine*, *Vogue*, *Motion-Picture Magazine*, *Dance Lovers*, *London Sketch*, *Shadowland*, *Art Lover's*, *Vanity Fair* and other magazines of national circulation. Mr. Bailey is a graduate of De Pauw University, one-time editor of the *Lyceum Magazine* and well-trained in the Fine Arts. We refer to this school at length because we believe that the idea of combining dancing and photography has merit from the pictorial point of view and because trained models will materially assist the photographic student in his work to express his original ideas. Those of our readers who may be interested should obtain further details direct from Mr. Bailey. We believe that a sincere attempt is being made to evolve a helpful course which will lead the student to greater pictorial and professional success.

Excellent Educational Publicity by Photography

RECENTLY our good friend and subscriber, Alvah G. Clark, who is school photographer for the School of Industrial Arts of the City of Trenton, New Jersey, sent us a really exceptional illustrated folder. Its title reveals its purpose, "Pictures of Students at Work and of the Work of Students". There are thirteen photographs and, with the exception of the front cover and a little text on the back cover, the folder depends entirely upon the illustrations to tell the story. So well is the photography done that we obtain a very clear idea of the courses given at the school and the equipment which is furnished. The illustrations show one or more students actually at work in the following subjects: cast-drawing, machine-shop practice, forging, throwing, period-ornament, modeling, cabinet-making, electric wiring, illustration, automobile-mechanics, etching, carpentry and dressmaking. The lighting-arrangement of the subjects and the technical work is a credit to Mr. Clark and to the splendid educational institution with which he is associated.

James Cooper

JAMES COOPER, who passed away recently at the Melrose Hospital, Melrose, Mass., had been a resident of Melrose for more than thirty years. He was well known to most of the older publishers and printers of Boston and its vicinity. He was born at West River, Prince Edward Island, October 14, 1845, a younger son of James Barrett Cooper and Jane Bagnall. As his father owned a printing-office, his training in that business began at an early age, and brought acquaintance with all its branches. Coming to Boston about 1864, he worked in several large printing-offices in Boston, being specially associated, however, with the foreign language press. He was a translator of ability in a great number of languages, his knowledge of technical terms being of special value in caring for foreign correspondence. He also provided translations from foreign sources for technical and trade publications. For a number of years Mr. Cooper, who was an experienced amateur photographer, translated important items which appeared in foreign photographic journals for the pages of PHOTO-ERA MAGAZINE. His accuracy and ability to select worthwhile material was of great value and it will not be an easy matter to find an equally well-trained translator. The Editors of PHOTO-ERA MAGAZINE wish to express their sorrow and to extend their sincere sympathy to the members of Mr. Cooper's family in a loss which is felt keenly by all who knew this exceptionally brilliant student and enjoyed his friendship.

43d Annual Convention, P. A. of A.

JUDGING by the amount of space sold for the Cleveland Convention, July 27 to August 1, it will have the largest representation of manufacturers and dealers that has ever graced a National affair. Ninety-five per cent of the booths were assigned three months before the convention and the remaining couple did not last another month.

The exhibitors to date include: Albany Card & Mfg. Co.; Ansco Photoproducts, Inc.; Barston Co.; Bausch & Lomb Opt. Co.; Beattie's Hollywood Hi-Lite Co.; Blum's Photo-Art Shop; Burke & James; California Card Mfg. Co.; The Chilcote Co.; A. M. Collins Mfg. Co.; Cooper-Hewitt Elec. Co.; G. Cramer Dry Plate Co.; Defender Photo-Supply Co.; The Dodd Co.; Eastman Kodak Co.; Ficks & Co.; Fowler & Slater Co.; J. S. Graham Co., Inc.; Gross Photo-Supply Co.; Gundlach-Manhattan Opt. Co.; The Hallderson Co.; The Haloid Co.; Hammer Dry-Plate Co.; The Holliston Mills, Inc.; Ilex Opt. Co.; Japanese Water-Color Co.; Johnson Ventlite Co.; L. M. Johnson; E. N. Lodge Co.; Fred M. Lawrence; Lenz Washer Co.; Mallinkrodt Chemical Works; Medick-Barrows Co.; National Carbon Co.; National Lamp Works of Gen. Elec. Co.; Norman Willetts Photo-Supply Co.; Pako Corporation; Photogenic Machine Co.; Presto Mfg. Co.; Sweet, Wallach Co.; Sun-Ray Lighting Products, Inc.; Taprell, Loomis & Co.; Sprague-Hathaway Studios Inc.; Vilas-Harsha Mfg. Co. and Wollensak Opt. Co.

Desk-Space: *Abel's Photographic Weekly*; *Bulletin of Photography*; Camera Craft Pub. Co.; A. A. Stone Co.

Second vice-president John R. Snow is asking every photographer in the country to send in three or more pictures for the picture-exhibit for each or either of the portrait, the commercial or the pictorial exhibits. Photographs should be mounted but not framed or under glass. Pictures for either group should be wrapped together and labeled for its particular class; the whole then wrapped together for shipping and addressed to Photographers' Convention, Public Auditorium, c/o L. G. Dickey, Mgr., Cleveland, Ohio, and labeled on the outside, "Picture-Exhibit."

President Manahan has arranged his program so that each of the following will be in daily attendance at their respective "Service Booth" during certain hours each day. They will also be on the regular program for lectures or demonstrations.

Mr. John H. Garo, Boston, Mass. We are all familiar with Mr. Garo's ability so that none can afford to miss his message on "How to Improve Our Pictures". He will be in the picture-exhibit one hour each day to give reviews on any picture on exhibition.

Mr. Chas. Aylett, Toronto, Can. will give a demonstration with a woman model, covering composition from the point of lighting and outline.

Miss Virginia D. Whitaker, Pittsburgh, Pa., will give an interesting talk on "How to Vitalize your Business". As manager of the Breckon Studios, she is fully qualified to lecture on successful methods of obtaining and handling business, specialising on the importance of personality.

Mr. Paul Burgess, Waterloo, Ia., President P. F. A. of A. Mr. Burgess will give a talk on Photo-Finishing, covering the subject from his experience as a photographer and a finisher. He will explain how it can be done on a paying-basis.

Mr. Ed. Sheasgreen, Minneapolis, Minn., "Sheasgreen" means "Cost Finding". That's his specialty and he will be ready to report on his survey of seventy-five studios, showing by illustrated charts, the cost of production. Here is an opportunity to learn something

about that much neglected side of the photographic business.

ENTERTAINMENT

The manufacturers and dealers always show us a good time. Here is what they have in store this year: Monday night, Officers Reception and Dance. Tuesday night, Boat Ride or Theater Party, (undecided at this writing). Wednesday noon, Ladies' Luncheon and Entertainment. Thursday night, Annual Banquet and Dance with Entertainment.

REDUCED RAILROAD-FARES

The customary reduction in railroad-fares on the "Certificate" plan will be in effect this year. By this means, members will be able to save half of the one-way fare for themselves and dependent members of their families, traveling by rail. Follow these instructions.—At the time you buy your ticket to Cleveland, ask for a certificate. *Don't* make the *mistake* of asking for a *receipt*. Present this to the Secretary at the Auditorium for validation. A minimum of two hundred fifty must be received before the railroad representative will validate a single one, so be sure to turn in your *certificate*. When the required number are in the Secretary's hands, they will be validated and then entitle the holder to the return trip at half the one-way fare by the same route used in reaching Cleveland. Reduced fares will not apply to stations having a one-way fare of sixty-seven cents or less.

P. A. OF A. SUMMER SCHOOL

Due to lack of interest and insufficient registrations, the Trustees have deemed it impractical to hold the Commercial Course this year, same having been scheduled for July 6 to 25.

The Portrait Course will be held as usual from August 3 to 29 at Winona Lake, Ind. This is an opportunity for members of the Association to take an intensified course in portraiture under the able direction of Mr. W. H. Towles of Washington, D.C., for the nominal tuition of \$50.00. This price includes the entire expense at the School. A registration fee of \$10.00 is required to be mailed to the General Secretary, 722 Bond Bldg., Washington, D.C. Balance of \$40.00 is payable at the School.

Photographic Club of Baltimore City

DURING the past year we have exhibited the works of the following as one-man Exhibits at the Maryland Academy of Sciences and the Baltimore Art Museum:

1. Geo. Rowe, Baltimore, Bromoil.
2. Elias Goldensky, Philadelphia, Chloride.
3. Rabinowitch, New York, Chloride.
4. Laura Gilpin, Colorado Springs, Chloride, Plat, Carbon.
5. Louis Fleckenstein, Long Beach, Calif., Chloride, Bromide.
6. Francis O. Libby, Portland, Me., Gum.
7. Fred. F. Frittita, Baltimore, Gum, Carbon, Chloride.
8. Mrs. Emily H. Hayden, Catonsville, Md., Plat, Carbon, Bromide.
9. Nickolas Murray, New York, Chloride.
10. Sophie Lauffer, Brooklyn, N.Y., Bromoil, Gum, Carbon, Chloride.
11. John H. Garo, Boston, Gum, Carbon, Bromoil, Chloride.
12. Jane Reece, Dayton, Ohio, Bromide, Chloride.
13. Dr. T. W. Kilmer, New York, Gum (June 1-15-25).
14. Mildred Ruth Wilson, New York, Chloride (June 16-30-25).



THE PUBLISHER'S CORNER



Publisher Ordered to U. S. Army Photographic School, Chanute Field, Rantoul, Ill.

THOSE who read the article on the U. S. Air Service Technical School Photographic Department Chanute Field, Rantoul, Ill., which appeared in the June, 1925, issue will understand my pleasure—as Captain, Signal Corps, Reserve, U. S. Army—upon receiving orders to report for fifteen days active duty to Chanute Field, July 19 to August 2, 1925. The opportunity to study the latest photographic methods and equipment is one which I am sure that my readers will appreciate. I have been told that the U. S. Army school at Chanute Field is months ahead of commercial methods and equipment. If so, there will be much to learn with regard to airplane, motion-picture and still-photography; not to mention the strictly military applications of photography.

In view of this military order and the required absence of fifteen days from my desk, I am very sure that my readers will co-operate by not expecting prompt replies to letters from July 19 to August 2. The usual office routine will be in charge of competent assistants who will give all matters within their power prompt attention.

The Latchstring is Out for You

MANY of my readers will motor through New England during the vacation-season; and, perhaps, they may have the beautiful White Mountain region of New Hampshire as their objective. If so, it is not a great distance out of the way to Wolfeboro from Ossipee, Sanbornville or Alton. Moreover, the trip from Laconia, The Weirs, Meredith and Center Harbor is one of the most beautiful to be found in the entire eastern part of the United States. It offers magnificent panoramas of Lake Winnepesaukee—"The Smile of the Great Spirit"—and the mountain-ranges which rise from its shores. Although the new state-road is not completed entirely around the lake, nevertheless, there are long stretches which are finished and in splendid condition. It is also possible to reach Wolfeboro by water, either by motor-boat or the famous steamer, "Mount Washington", which makes two trips daily around the lake. No matter how the reader may reach Wolfeboro, let me say that he is heartily welcome at the home of PHOTO-ERA MAGAZINE and that it will be a pleasure to render any service possible which will add to the enjoyment of his visit.

At Number Five Bromfield Street, Boston

THOSE who have called at this address, gone up one flight and opened the door bearing the legend Tremont Camera Exchange, know that there may be found a man who enjoys the confidence and respect of the leading amateur and professional photographers of Boston, Mass. There, too, may be found the finest that there is in high-grade photographic equipment. Best of all, the proprietor, Abraham Feigenbaum, welcomes the visitor with a real smile and in him the camerist may place implicit confidence. Whether

a purchase or exchange is consummated or whether the call was made just for a word of expert kindly advice, matters not at all to Abe. He is there to serve and to do it with the customer's best interests always in mind. No wonder that Abe has built up a reputation for square dealing which has reached out far beyond the confines of Bromfield Street. Our readers will find that a call will prove to be very much worth while, and that they will learn more about real high-grade cameras and lenses than they ever did before.

Between the Upper and Nether Millstones

IF a disinterested person should happen to ask whether or not my readers took a real and active part in co-operating with the Publisher of PHOTO-ERA MAGAZINE to work out policies and standards for the good of all, I am in a position to say "yes" emphatically and to back up my statement with a pile of splendid letters. Let me say right here that the response has touched me deeply and I thank every one of these good friends. I hope that they join me in feeling happy over such a friendly, cordial and delightful correspondence. Furthermore, I feel assured that, even though some of my readers will be disappointed not to see their well-meant suggestions adopted, they will take it all good naturedly and be patient. Frankly, I am between the upper and nether millstones. No matter which way I turn or whatever I do, some good friend will have his suggestions apparently disregarded; but it is really impossible to please all at one and the same time.

This preliminary paragraph leads to the point, namely, how best to conduct our competitions. At this writing the majority seem to favor a happy medium with regard to the monthly subjects. That is, most readers believe that three or four miscellaneous competitions a year are enough and that the others should be devoted to special subjects. This matter has been under discussion for several months and readers have responded from all parts of this country and overseas so that I feel that now a definite program can be arranged with fairness to all. Therefore, let us all try it out for a while, at least. Those who approve will have an opportunity to make an increased effort; and those who disprove will have the opportunity to show that they are good losers and that they will not give up their interest simply because they could not have their own way. I am confident that those who have taken the trouble to write me at length are the type of men and women who make the best of things with a smile and carry on just the same.

Photo-Era Index to Advertisers

WE call attention to a new venture which we believe will be of service to our readers and to our advertisers. For lack of a better term we shall call it "PHOTO-ERA Index to Advertisers". The purpose is to help the reader find the advertisement of the manufacturer or dealer in whose product or service he may be interested. We hope that this index will prove to be a real help to our readers and advertisers.



POPLARS, TAMWORTH, N.H.
A. W. CUTTING



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Is Photography Art?

GERTRUDE LEVY



S photography art? "It's pretty, but is it art?" the devil whispers in Kipling's poem; and every man who has tried to produce something beautiful with another standard than the dollar mark has been haunted by that cry. It is the old, old question. What does the public ask of portrait-photography? What sort of photograph would you like the cameraman to make for *you*? A portrait-study, the sort of thing an artist might paint; a pleasing print, which resembles your mental conception of how you might look; or, as a great photographer said, half sadly, half in bitterness, would you ask him to give you a retouched "map of your face!"

"Photography is not a fine art, but there is fine art in photography," said this photographer, whose work has won fame throughout the civilised world. "The camera process is mechanical, therefore, we may not call it an art. But I have proved before a class of artists that there is fine art in photography. It is a very hard thing to prove; but I challenged anyone of them to produce such a thing as this with his brush."

He pointed to a superb study in line, a woman seated at a mahogany *escritoire*, her full soft skirts, something flowered and old, flowing in a succession of subtle curves to the arrogant table-legs of thin, polished wood. The whole print had something of the quality of rare, old wood.

"Not one of those painters could copy that picture. No photographer will ever duplicate it. Something of mine has gone into it, something that no other man will be able to give it. A great artist could reproduce it, yes! But out of the thousands who paint, there are only half a dozen real artists in America."

Art-critics who study the work of Goldensky, of Philadelphia, whom I have just quoted; Towles, of Washington; Pirie MacDonald, of

New York, say that of the thousands who make photographs in America, there are but half a dozen real photographers. Many men paint, and many men make photographs, but their work is indistinguishable from that of their fellow-craftsmen. That is not art! It is not enough, say these critics, for a man to produce an hundred pretty photographs, soft effects with a highlight here and there, now and then one better than the next. It is not enough to photograph a pretty face, and depend on the inherent charm of the subject to win acclaim. "You must originate, you must work with imagination and inspiration, you must create something new for each subject," cry these critics, "if your pictures are to live!"

"Photography has some advantages over painting," Goldensky explained, "for the artist must spend a great part of his skill in mechanical drawing of line, sketching the subject on his canvas. The camera draws for us, leaving us four-fifths free for art. Painters try to rival the camera, but they cannot draw their sitter as he is.

"So they idealise their subject—and this is the great advantage of the painter; he may suppress detail. He may blot out a line, or merely suggest a feature. Therein he triumphs over the camera. The camera cannot suppress detail."

The camera cannot suppress detail! But I gazed over the head of the speaker at a beautiful gray study of a nude in classic pose, almost severe in its simplicity, light *nuances* as delicately shaded as if done in charcoal, with a wonderful illusion of color-tones. Not an unnecessary detail marred the picture. The photographer's skill in arranging his subject had triumphed over the limitations of his medium!

These nudes of Goldensky, experiments in photography which he calls his "exercises", offer an amazing variation in theme and treatment. Some are in pale gray, some almost in



THE SPRINGTIME-GIRL

CHAS. CLAYTON, JR.

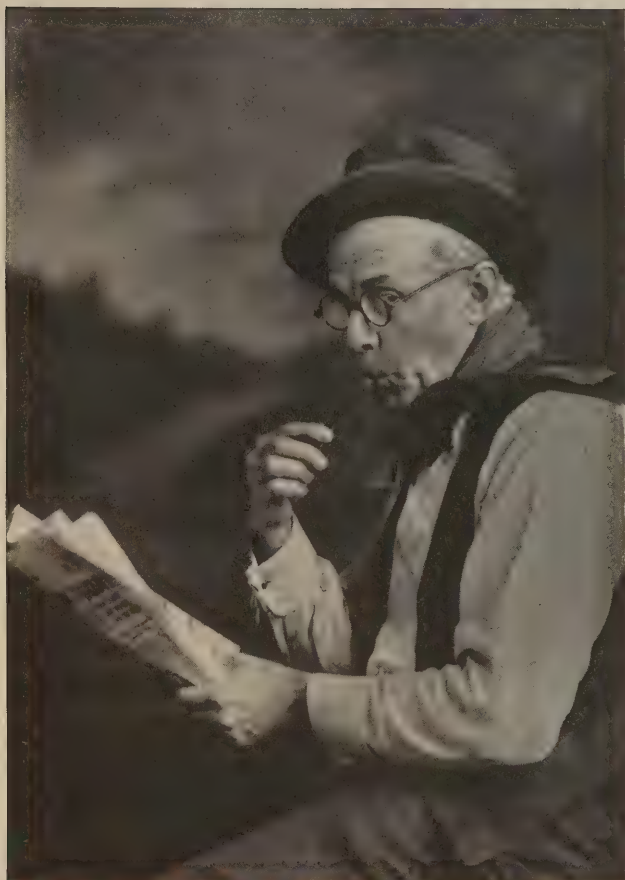
HONORABLE MENTION—ARTIFICIAL LIGHT PHOTOGRAPHS

black; others seem to glow with a reddish light. One portrays the back of a man, great muscles thrown into relief, almost menacing in its strength, the outlines black, as if etched with ink. Next to it hangs the figure of a girl, an exquisite line from shoulder to foot, and here the figure seems to be drawn in white! Each is as simple in design as a Greek statue, but with an inspiration, a warmth, a vitality that photographs of sculpture do not achieve. One daring study is done in tawny gold, the upper half of the torso drawn back, narrowing the waist to half its size,—of this study, an art-critic once declared: "It violates the laws of composition, but Goldensky is entitled to do that—he succeeds in producing what he has conceived."

"Painters can change, as well as suppress detail," Goldensky explained, showing me some of the portraits that line his walls. "They can paint in a pretty pair of hands, if their model has

commonplace ones. We cannot alter your hands. But we can put them in so—" pausing before a lovely decorative study of graceful curves, a girl holding her scarfs,—"Or place them thus—" a somber portrait of a woman, hatted, cloaked, her arms extended, one hand a faint patch of light against the dark fur of her coat, part of its background, but as vivid as if done in scarlet. "We work in monochrome, but we achieve color-effects." Each portrait of this photographer reveals itself as an experiment, illustrates some conviction of its maker.

A like impression is gained from a visit to the Towles studio in Washington, where may be seen some exceedingly beautiful portraits. "The photographer can make only as good a picture as he is able to see," said W. H. Towles, justly famed for his wonderful lighting-effects. "He must see his picture, completed, before he exposes his plate, to make a good photograph."



CHARACTER-STUDY

U. STEPHEN JOHNSON

HONORABLE MENTION—ARTIFICIAL LIGHT PHOTOGRAPHS

With an ingenious arrangement of screens and curtains, this photographer is able to control a light ranging from 1 to 37,000 candle-power in intensity. At the request of other photographers, he has toured the country with this apparatus, making demonstration-photographs before large gatherings of his colleagues, and explaining his methods, step by step, as he posed his subject for the portrait.

Ladies who come to the Towles Studio are requested not to use make-up, for the photographer declared: "Rouge and powder are detrimental to a good photograph. The skin reflects light, but cosmetics absorb it. Powder fills in the fine skin-texture, and destroys the modeling surface of the face. As for lips painted in Cupid's bows—they make a picture flat and toneless."

Mystery, and a refinement of dignity, characterize his women's portraits. Many of them are entirely unretouched. All of Towles' portraits are as life-like as they are beautiful. They have

won him every award possible to a photographer in this country and in Europe. They reveal many points of difference with the conventional photograph. He never retouches portraits of men, and produces striking effects of strength and virility, without the exaggeration which would suggest brutality. His portraits of children are charming, unstudied in effect, their lightness and airiness symbolic of the freedom of childhood.

Pictorial backgrounds are tabooed in a Towles' portrait, for the photographer holds that an unbroken background, relieved only by variations in light, has the simplicity of permanence. "Nothing must detract from the subject," he said. "And there should be no light in the background higher than the highest light in the head. Otherwise, the background will compete in interest with the portrait."

"Expression depends not alone on the eyes and mouth, but on the whole surface of the face.

I regard the head as a round object, with protuberances. Ordinary lighting brings these protuberances into relief, leaving the rest of the face in shadow. Other lights must be arranged to reveal the whole modeling of the face, with its fine shadows and curves,—for all these things are part of the expression.”

What is to be the future of photography, this strange new calling which mixes art with commercialism, to the confusion of its critics? What, indeed, is its present status?

“Photography is a trade; it is not even a profession—” said Goldensky. “Its awards mean little. Its standards are not yet defined. A man comes into a studio, sees a print that pleases him, and says, ‘I want my picture made like that.’ He may select something quite unsuited to him, but the photographer says, ‘Very well. I shall charge you so much for one or so much for a dozen prints.’ If photography were a profession, the photographer would study each subject, analyse him, precisely as a lawyer or a surgeon studies each man who comes to him. If the man said, ‘Take me hatted, or bare-headed,’ the photographer would not listen! He would give one sitting, or ten, putting into it as much work as required. Then he would say to his patron, ‘This is the fee.’”

A college of photography, opened only to High School students, is the ideal method by which this photographer thinks such a state may be attained. The curriculum he would suggest includes physics, chemistry, optics, fine arts, theory of fine arts, drawing, psychology, physiology, history and general cultural subjects. “When photographers of the future begin their work with such training”, prophesies Goldensky, “they will have a foundation upon which to build a profession.”

Three well-defined trends characterise modern photography. The Conventionalists strive only for a likeness. Their work is mechanical. The Secessionists, whose pictures are highly impressionistic, use the camera, not altogether successfully, as a medium to express ideas. Midway between these two is the Pictorial school, among whose exponents are the photographers I have cited.

The fine arts and photography! How jealously have the titled callings defended their domain against the incursion of this child prodigy of science,—this century-old infant that prattles of art, matching its cardboard prints against the treasured masterpieces of the ages! Even now its leaders stand upon the border-line. Who knows but that they shall enter there some day!

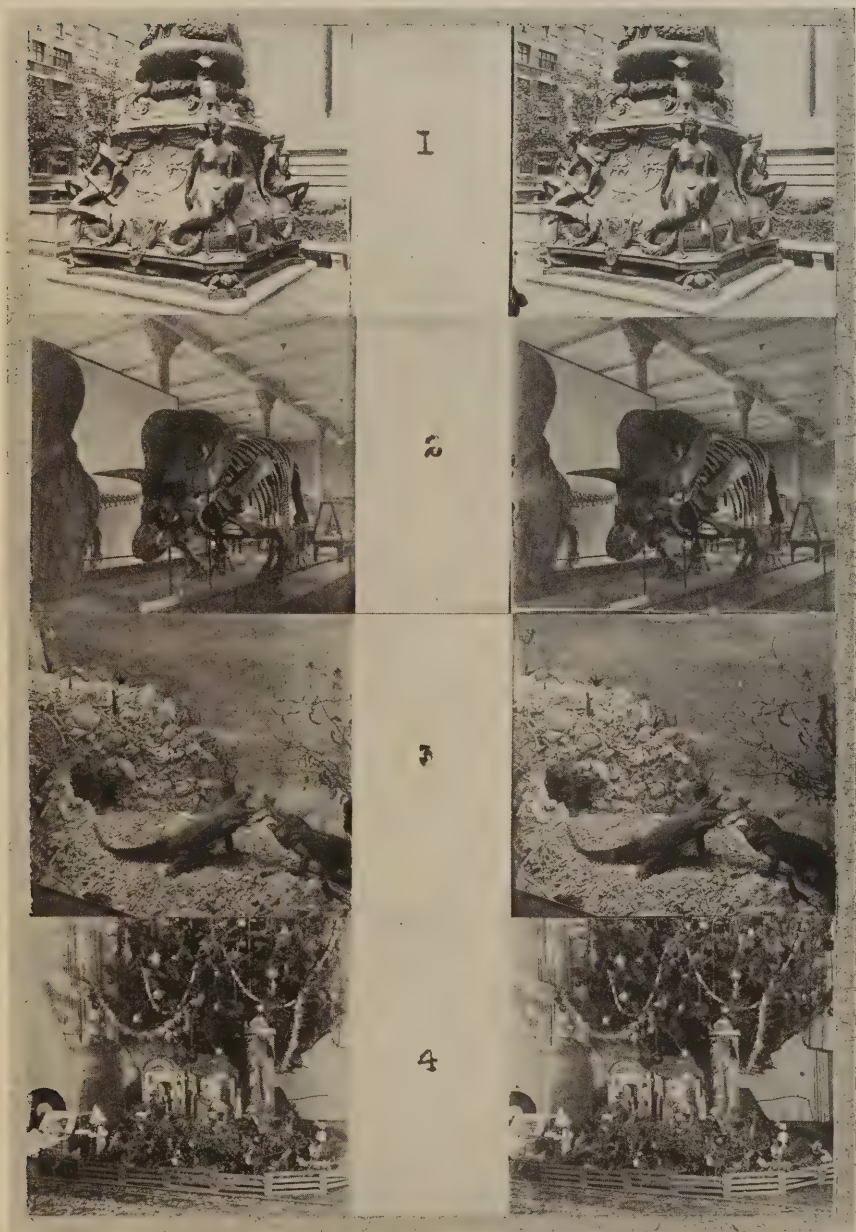
Notes on Stereophotography

A. JUPENLAZ



O those not conversant with stereographic photography or stereographs a few remarks as to just what a stereograph is may not be amiss. The ordinary photograph portrays an object by recording the various degrees of light and shade as reflected from it. All the different parts of the subject are recorded in the same plane although their distance from the camera may vary from a few feet to miles. There are three qualities in the ordinary picture which tend to bring out the sense of distance: A variation in the distinctness of the different objects shown; the comparative size, and, in a lesser degree, the intensity of light and shadows. To bring out the above mentioned qualities in a photograph is often very difficult, depending on the light available, and, in landscapes and outdoor-scenes on the condition of the atmosphere, a slight haze being often necessary to accentuate distance. Another shortcoming inher-

ent in the ordinary picture is that the actual shape of solid objects can be indicated only by a proper lighting of the subject, a ball or globe appearing as a disc. Only by the delicate shading produced by a proper lighting of the subject can its real shape be indicated in a more or less successful manner. This inability to satisfactorily show space and form is due to the absence of one of the three dimensions of space. As we look at a picture we see only the dimensions extending right or left and up or down, but not the depth extending into the picture; we see the view as seen with one eye. The fact that we have two eyes, a certain distance from each other, enables us to see objects in solidity and relief, in that each eye gives us a slightly different picture, which difference depends on the shape and distance of the subject. Now all that is necessary to enable us to see objects in a picture as the eyes see them, are two pictures made from points about 64 mm. or $2\frac{1}{2}$ inches—the average



FIGURES 1-4

A. JUPENLAZ

distance between the eyes—from each other. These pictures must then be presented to the eye so that the right eye sees the picture made with the right lens and the left eye that made with the left lens of the stereo-camera. Two pictures thus properly mounted for viewing, constitute a stereograph.

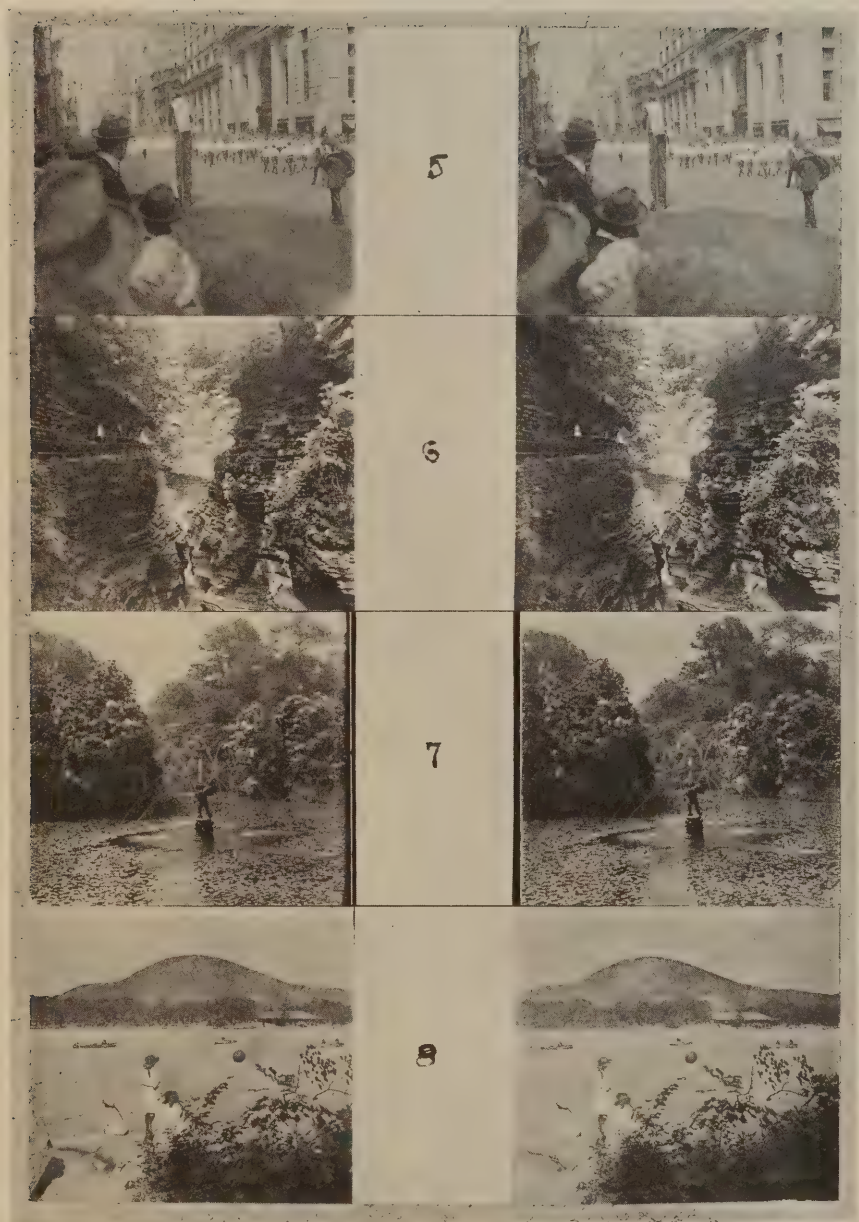
The stereograph showing, as it does, objects exactly as they appear to the eyes, is essentially a "record" photograph. Since most photographs made are of that nature, stereoscopic photography should appeal to a great number of amateurs. As a means to revisualise scenes of bygone days, of travels in our own and foreign lands, a stereograph cannot be surpassed.

There are certain classes of subjects for the reproduction of which in the form of pictures the stereo-camera is specifically adapted, and, it may truthfully be said, the only means to bring out the full character and beauty of the subject. Such classes of subjects are enumerated in the following paragraphs:

WORKS OF THE PLASTIC ARTS, such as statues, plaques, bas-reliefs, architectural details. Subjects such as these are reproduced by a stereograph with absolute fidelity; it may even be claimed that a stereograph affords a better opportunity to enjoy and study such subjects than a view of the object itself. Although proper lighting of the objects is desirable, it is not of such paramount importance as it is with the ordinary picture, for with the stereograph the sense of roundness and relief is not dependent on the lighting to any great extent. This is of great value to the amateur and traveler, as these cannot, as a rule, wait until the sun shines, or light falls from the right angle, to enable an acceptable picture to be made. Again, in museums, city-streets, or in fact anywhere, it is not always possible to separate the subject from obtrusive details in the background, or in the case of statuary groups, to separate the various unities from each other, except by a stereoscopic picture. It often happens that subjects, such as those under discussion, cannot be photographed except from a viewpoint which will make it appear, for example, that the headgear of the hero portrayed by a statue, consists of a churchspire. Such an incongruous effect cannot ensue in a stereograph, as the background will appear at its proper and true distance. While speaking of architectural subjects, mention may be made of the difficulty of adequately conveying an idea of the imposing height of towers or buildings by means of the ordinary camera as usually carried by the amateur. (The word amateur as used in this article meaning merely a lover of the art in contradistinction to the

photographer who has made photography his vocation, and not in the sense of a beginner or one not skilled.) It is well known that this cannot be done by tilting the camera; and yet, that is often the only way in which the subject can be included in the view, the picture resulting from this procedure being always worthless. Though in usual cases it is desirable to make sure that the camera be held level in making stereographs, nevertheless excellent results can be obtained by pointing the stereo-camera up or down in cases where it is also natural to look up or down, as when looking up to or down from great heights. I have in my possession several views made from the Woolworth Building in New York City which are most realistic when viewed in a stereoscope, even to the extent of actually inducing dizziness in persons who are subject to this sensation.

SUBJECTS OF AN EDUCATIONAL OR SCIENTIFIC NATURE, such as are exhibited in museums and schools. The value of showing this class of objects in minute detail in solid mediums such as wax, plaster-casts, or by the preserved objects themselves, is vouched for by the great expense incurred in preparing such exhibits, rather than showing the objects by means of pictures. In such exhibits the primary consideration is not artistic effect but scientific accuracy. This can be obtained most satisfactorily by a plastic rendering. Such exhibits consist either of rare originals or costly copies of specimens and are only accessible to persons living in, or able to visit, the larger cities, where museums of various nature are located. By means of the stereograph, these exhibits can be made available to anybody at small expense, and in such a realistic manner that little if anything is lost in the reproduction. During the last year I have made a number of stereographs in the Museum of Natural History in New York City. These were obtained under some difficulties, lack of good light, most of them being made with the electric lights as the only source of light, others by an exposure directly against the light coming from windows. Had I attempted to make these pictures with an ordinary camera the results would have been practically worthless, due to light-conditions above mentioned, reflections from plate-glass cases in which the subject was placed, and the mass of details in the background. In a stereograph the lighting is not of such critical importance, the extraneous details take their proper place, even the reflections which would render the ordinary picture unsightly, are not really annoying in a stereograph as they appear as such, the distance of the lights causing them to be clearly indicated. Many of the pictures,



FIGURES 5-8
A. JUPENLAZ

especially those of the various bird-groups, appear so natural that it is difficult to convince persons viewing them that they are not made direct from nature. Due to the location and the lighting of these groups it was possible to make the pictures without showing any part of the cases in which the exhibits were contained.

INTERIOR AND OUTDOOR SCENES IN WHICH THERE IS A WEALTH OF INTERESTING DETAIL. Subjects such as were mentioned in the preceding paragraph are often replete with small detail and therefore seldom make a successful picture of the ordinary kind. A Christmas-tree with its wealth of ornaments is another example. A stereograph of these subjects constitutes a pleasing record of the latter and a picture filled with information and instruction of the former class of subjects. Among outdoor scenes are many that charm the eye but appear commonplace and devoid of interest when photographed, due to the bewildering mass of detail. Botanical gardens with their profusion of flowers in bloom, or ravines with a jungle-like mass of shrubs and trees make an interesting and beautiful stereograph. Wherever crowds of people congregate as at parades, public ceremonies, at bathing-beaches, the ordinary photograph will show them "plastered" against each other making anything but a pleasing picture, but the stereoscope again will show them separated, each individual in his or her proper place. In a parade you can see the spectators lined up on the sidewalks, not obstructing the view but providing the proper atmosphere to the occasion. The only thing your imagination must supply to complete the picture is the music. Even the hat on the person in front of you, which, in the ordinary picture would appear as the principal item, but adds to the realism of the view. It would be a poor parade indeed if it did not draw a crowd sufficient to make you stand on tiptoe and strain your neck to see something.

LANDSCAPES AND OTHER SUBJECTS IN WHICH THE SENSE OF DISTANCE IS A FACTOR. You are on top of a mountain, hill, or other height. Before you is spread a panorama of valleys, in the far distance an imposing range of mountains, a beautiful view. An exposure is made. The finished picture shows an uninteresting foreground, above that a hazy expanse of landscape fringed on the top by a wavy line hardly noticeable. Of distance not a trace. It is like a map without the scale being given, conveying no sense of distance or size. The same view made with a stereo-camera supplies you with the scale to the picture. A few objects in immediate foreground are all that is needed, the valley, the hills, recede into distance, and far away

loom the mountains, their height and grandeur accentuated by the sense of distance imparted to the view by the binocular vision made possible by the stereograph.

DETAILS OF INTRICATE PARTS OF MACHINERY AND SIMILAR ITEMS. A stereoscopic representation will often show more than numerous detail drawings, showing, as it does, the parts in their correct perspective and shape, and, it must be remembered, in their full size. Engineers and designers should be interested in this.

But, many readers will ask, why is stereoscopic photography not more popular? There are several reasons, some based on fact, others not. They are best brought out in a general discussion. Nearly every amateur begins his photographic career with an inexpensive box-camera, Brownie or Kodak. At first, much pleasure is derived from snapping any- and every-thing with resulting pictures which are nothing to brag about. But, as there is no pleasure in doing the same thing over and over again in the same way, and as the tastes of the beginner become more discriminating he soon looks to an improvement or, at least, a change in his hobby. It is at this point where it could be expected that many would change to stereophotography. There are I believe three principal reasons that they do not. The somewhat higher cost, the supposed difficulties of this process, and the lack of acquaintance with this phase of photography. When one takes note of the expensive outfits carried by many amateurs, the first of the reasons given does not seem to hold water, as a good stereo-camera may be had at a cost not higher than the better class of single-lens cameras. The attainment of good results in the making of stereographs presents no greater problem than that of making good photographs in general, except that proper exposure and development, and especially cleanliness of working have a slightly greater bearing on the final result than these requisites have in making an ordinary photograph. This is particularly so in the preparation of the 45 x 107 mm. size which, of course, is greatly enlarged by the stereoscope. A good stereograph is, however, so effective and pleasing that a little extra care in its preparation is well repaid. I believe that lack of acquaintance with stereophotography is the outstanding reason for its comparative disuse. Many have never seen a good stereograph. The samples sometimes seen in photo-shops are, with very few exceptions, poor; nearly always underexposed and overdeveloped. A good stereograph should possess delicate gradations, avoiding highlights and deep shadows, and rather lacking in contrast, as com-

pared to the ordinary picture. Improper alignment of the two pictures, scratches, and dust-spots are other defects much in evidence. It appears to me that manufacturers and dealers in photographic supplies do not show the interest in the promotion of stereophotography which this branch of the industry merits. This condition does not seem to be good business. Many amateurs drop out of photography forever whose interest would have been kept alive had they known the delights of this phase of the hobby.

Now a few words to those who have been bitten by the pictorial bug. Your artistic nature can find expression in the choice of the

subject, the lighting, and viewpoint. The only thing you cannot do with the stereograph is the obliteration of the details which procedure seems to be the *sine qua non* of pictorial photography. But why worry, you still have the single picture from which enlargements can be made, with the added advantage that there are two of them from which you can pick the one with the least defects, if there be any. Or, you probably still have the little box-camera with the meniscus lens, with which you began your photographic career. This, I have been told, never fails to produce artistic results in the hands of a master.

Leading vs. Being Led in Photography



HOTOGRAPHY began with an outline—a mere shadow or silhouette produced by the action of light on a sensitised material, but it was some time before this image could be held. Then came the fixed image and later on the registration of light and shade and halftones which gave to the world the real beginning of photography.

The most difficult thing today is to imagine the world without the pictures of places and people which have resulted from this wonderful discovery. How many of us would recognise the late President Harding, Herbert Hoover, General Pershing, Marshal Joffre, Clemenceau, Lloyd George, our new President Calvin Coolidge, or any of the other great world-figures were we to meet them face to face, were it not for photography. And what a poor conception we would have of the world in general had we not been able to form our ideas from pictures of people and things.

Like many other great discoveries or inventions, photography was at first a novelty. People had the curiosity to know how they looked in pictures. And, at best, those early photographs were little more than records. They were maps of one's features, set and fixed. One could expect little more when it was necessary for the early photographer to clamp his subject in a chair so that it could not move while the long exposure made the picture an assured success.

Then came the photographic materials that permitted the photographer to make exposures much faster. The sitter would even be asked to smile, but there was always the admonition to "hold it" which too often made the smile a

congealed one or, at the most, an indication of an unnatural and lifeless or forced expression. Then came still further improvements in photographic materials and especially in their speed which made the motion-picture possible. And what wonders we have seen in motion-pictures—what breadth and scope of learning, as well as amusement, they have brought to the world is a matter of common knowledge!

But they have also educated the picture-buying public to expect something more than they have been getting in their own portraits. They can't expect motion-pictures; but they know that every changing expression of the "movie" actor or actress is made possible by the rapid succession of hundreds of pictures made at the rate of sixteen per second and that any one of these pictures, separately, is a still-picture representing a part of some action. Why, then, is it not possible for the portrait-photographer to animate his subject, choose the most pleasing pose and expression and catch it with his camera? Possibly, that is the gist of the thought that runs through the mind of many a prospective sitter for portraits, even though the thought may not be expressed in words.

It is a little too much to expect that the photographer would use his lights as strong as the motion-picture cameraman—it wouldn't be practical—so he could not very well be expected to make exposures that would stop motion in the way the "movie" man does. But he can make reasonably short exposures—he can dispense with head-rests and similar pieces of apparatus that make people uncomfortable or ill at ease—he can engage his sitter in conversation, omit much of the usual experimenting with lights and work

quietly but fast, obtaining a number of exposures before his sitter is aware of the fact that he is really making pictures.

Some photographers insist that this cannot be done—that it sounds well but isn't practical. But it is being done—the sitters are pleased with the results and the photographers are known as successful men. It is the same plan that the successful photographers of babies use every day, but it is merely varied to suit the grown-up. In the one case the photographer talks baby-talk—in the other he talks grown-up talk and adds the deception of only making preparation for the picture-making when, as a matter of fact, he is actually making fairly fast exposures while his

subject is relaxed and free from the self-consciousness that comes with the knowledge that an expression is being made to order or at least coaxed out by the photographer.

Possibly, it is a good idea to talk over such matters occasionally with those about us just to see if the people we make pictures for are being led by us or are leading us. One can not afford to wait until the public demands something different or better in photography. The demand should be anticipated and then created by constructive advertising and then supplied. The photographer who does these things leads his patrons and is not led by them.

Studio-Light.

The Camera and Conservation

C. M. CAMPBELL

IN the year 1753 George Washington traveled across the State of Pennsylvania from Pittsburgh to Fort Le Boeuf, following the Allegheny River to its junction with French Creek, at which point Fort Venango was built, and where is now the city of Franklin. From Fort Venango he continued his journey to Fort Le Boeuf—leaving the Allegheny, to follow the winding course of the creek for much of the remainder of his trip. In recounting his travels,

Washington mentioned the abundance of wild life, the Indians and the beautiful alluvial meadows along his route; and, after all the intervening years, there is today no more delightful valley in the Keystone State. A native of this region is likely to think of this with a feeling of regret that The Father of His Country cannot again pass through this beautiful section of Penn's Woods.

It is known that the watchful eye of the Indian took Washington's measure as he traveled



SURVIVOR OF A VANISHING RACE

FRANKLIN G. MCINTOSH

HONORABLE MENTION—SCENIC CLASS



BREATH OF SUMMER

C. M. CAMPBELL

FIRST PRIZE—SCENIC CLASS



PADDLE YOUR OWN

C. M. CAMPBELL

SECOND PRIZE—SCENIC CLASS

WILD LIFE LEAGUE PHOTOGRAPHIC CONTEST



A QUARTETTE OF SCREECHERS

C. M. CAMPBELL

FIRST PRIZE—WILD BIRD CLASS



IN WINTER PASTURES

HENRY W. SMITH

HONORABLE MENTION—SPECIAL CLASS

WILD LIFE LEAGUE PHOTOGRAPHIC CONTEST



SETTER POINTING

H. L. PRALL

FIRST PRIZE—HUNTING-DOG CLASS

from Pittsburgh to Waterford, beside these waters. The traveler of today who bends his steps along these streams is under the equally watchful eye of the Wild Life League. Organised in Pittsburgh, this body of sportsmen have established branches in virtually all of the larger cities and towns of Western Pennsylvania. Their influence is state-wide. The organisation stands pre-eminent as a unit for conservation, reforestation and the propagation of game and fish for the forests and streams of its state. Its voice is heard in council at meetings where legislation affecting the fish, forests and wild life is under discussion for the purpose of forming new laws, or for the amendment of laws already in force.

But in what manner does photography enter into a problem of conservation of fish, game or forest? Let us see. Conservation is a watchword of the Wild Life League. The camera aids in the conservation of wild life in more ways than most of us observe. It does not harm the wild life of any field or forest. When used intelligently, it preserves a record of wild bird or animal not obtainable by other means without destruction of that bird or animal, or interference with its liberty. A prominent lecturer on song-bird conservation recently stated that a lad with a new rifle shot a bird, and as it fell to the ground,

called out in glee to his companions, "I got him!" The lecturer contends that the boy did not get that bird—he destroyed it. All he got was a bloody mass of flesh and feathers. The bird, its winning ways, its usefulness, its song—was gone forever. Arm this lad with a camera and he will experience all the thrill of stalking and "shooting" that bird without harming it, and, in addition, will take home with him, not a breakfast for the cat, but a record of bird-life which may be an object of pride and joy to him as long as he lives.

The game laws of Pennsylvania do not permit any hunting, or killing of game in closed season. At such times the sportsman may not go afield or to the forest with dog or gun, but, armed only with his camera he is at perfect liberty to "shoot" at anything his fancy may dictate, and, possibly, take home a "bag" of far greater value than the legal "limit" of the most liberal open season. Photography has a tendency to make the hunter an all-year-around-sportsman, with an ever-increasing interest in the wild life of his vicinity. The use of the camera serves to lessen his desire to kill as his ability to study and record the habits of the native wild life increases, and helps to make of him a *real* sportsman, law-abiding and an exponent of conservation.



THE KILL
FRANKLIN G. MCINTOSH
SECOND PRIZE—WILD ANIMAL CLASS

The League also maintains an educational department which co-operates with the Game, Fish and Forestry Commissions of the Commonwealth. The idea of creating a local photographic contest was conceived by our Chairman of the Publicity Committee, who is also one of our State Game Commissioners. His idea was to create among our members and their associates an interest in Nature and a love for all the great out-of-doors. He wished to bring before the public photographic evidence of the beauty of our fields and streams, and portray the habits and conditions of the surrounding wild life, of field, forest and stream. It is part of our educational program to teach conservation of wild flowers as well as of wild birds and game. Carefully photographing a wild flower in its native setting gives one a picture that will live on through the years. To heedlessly tear that flower from the earth, root and all, is equally as heartless as the killing of the birds whose songs announce the coming of Spring.

When it becomes necessary to procure evidence of stream-pollution by sawdust, acids and the like, the camera again proves its usefulness by furnishing indisputable evidence that harmful matter is reaching streams which the sportsmen are continually striving to re-stock with fish.

The fish-and-game wardens fully recognise the value of the camera in their work in the interests of propagation and conservation. These men know that the use of photography is not limited to the portrayal of the beauty of the landscape. With the aid of his camera the fish-warden can produce illustrated reports on the volume and clarity of a stream in low water or flood, in any season, and the fish-commissioners are enabled to decide readily whether to stock or reject it by the evidence thus presented. In like manner, the game-warden may portray the "lay" of a section of land which may be under investigation for the proposed establishment of a game-preserve or sanctuary. A few well-made photographs can place before the members of a game-



SNOWDRIFTS

HENRY W. SMITH

FIRST PRIZE—HUMAN INTEREST CLASS

commission an excellent record of the extent of field, swamp or forest where photographic prints will afford a more comprehensive description of hill, dale or timber-conditions than a volume of writing or an hour of verbal description, and the warden may add to the list of his camera's conservations the time it has saved him.

When once a sportsman takes up wild-life photography his album will begin to fill with pictures that are unusual. The reason for this is at once apparent. His interest in the game he hunts in open seasons carries him far afield and deep into the forest in early spring and summer during the closed season. While on such rambles he may visit the haunts of game in the nesting and breeding-periods without harm to the game, and with patience and a little luck may bring home pictures of wild life ranging from birds' nests to bear-cubs. At such times, his opportunities to find odd things to photograph are almost unlimited. Sportsmen's photographs may lack pictorial perfection; but this may be overlooked because the subjects are out-of-the-ordinary—things which hold the interest of his friends, as well as convince them that all shooting is not slaughter. Sportsmen, generally, are busy men. The average man has but a few days each year for recreation, and is likely to choose the open game-season for his

vacation. When once the hunter's interest is divided between his gun and his camera he will find time in busy seasons for additional recreation afield, and may add many pleasant and profitable hours to his allotment of leisure. His camera will open up new territory in which he may hunt. The ground may be the same he hunted over in the autumn; but the scene in closed season will be vastly new to him when he hunts with his camera. When a sportsman becomes capable of appreciation, and understanding of the wild things in their native haunts, he will be equally incapable of the wanton destruction of them, not for himself alone, but for others who may follow. This is conservation, and—being a good sportsman—he will convey his new-found humane ideas to his children, his neighbor and his neighbor's children, that they may benefit accordingly.

Photographically, the work of our League is yet in its infancy. Nevertheless, we are amazed at the results already in evidence, and we hope that through our efforts, it may be a means of helping to perfect a system of conservation which will ensure reforestation, an inheritance of unmolested liberty for our song-birds, and leave fish and game in plenty to hand down through the years to the coming generations of our State and Nation.

Practical Kinematography

HERBERT C. MCKAY

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Chapter VIII—Trick-Work



HE kiné-camera is truly a "Magic Box". There is little that is impossible in the field of motion-pictures, and each day brings forth new marvels in this realm of fairyland. The Indian fakir causes a mango to grow in a few moments, under a cloth; but the magic box shows us a plant thrusting up from the earth and unfolding leaf by leaf. The great Houdini once featured a trick in which he apparently caught in his teeth the bullets from pistols which had been fired at him. The kiné-camera shows us real bullets fired from rifles which drift across the screen very lazily and pierce glass bulbs which do not break until the opposite wall is also shattered. In olden times, necromancers professed to be able to call forth skeletons from their graves; but we can see a radiokinegram, which shows us a skeleton articulating as in life. Theosophists tell us that the astral body can journey far from the corporeal body; but upon the screen we can actually see one body leave its duplicate and leave. Or one body can separate into two which thereupon take up mutual action.

In short, the world has ever been filled with miracles; but these miracles were heard of only, rarely if ever seen; but today anyone can see the best of these old-fashioned miracles outdone. The kiné-camera has brought to us a world of wonder; but so familiar have these effects become that we think little of them. All of these miracles, or "Effects" as the kinematographer modestly calls them, are the results of trickery.

As usually spoken of, trick-work means camera-manipulation; but there are effects obtained by straight photography which I shall include, because the spectator is deceived by some juggling of sets or props.

We are all familiar with the little device once so popular, known as the "duplicator" which enables two blended exposures to be made upon one plate. The same basic idea is used in a great deal of kiné-trickery. The double exposure is subjected to infinite variation; but in some form or other it is used every day in regular production. One point of difficulty will at once be apparent to my readers. It would be obviously most difficult and tedious to expose one half a frame, then the other half, then repeat this process sixteen times for every foot of film. An

ordinary scene would be drawn out into countless hours instead of seconds and would in all probability be worthless when completed.

Double exposure, as practised, is far different. The mask, corresponding to the old duplicator, which closes one half the frame, with a softened line of division, is placed upon the camera and the action photographed in the usual manner. When complete we have a strip of film, one half of which, that is one side, bears a latent image and the other side is still raw stock. This film is now rewound behind closed shutter and capped lens until it is at its original position. Then the second half of the "duplicator" is inserted, the first half removed and the corresponding action of the other half of the field photographed. Thus we have the entire film exposed in only a little more than twice the time required for straight work. The duplicator used is a device known as the double-exposure device and is described in the first chapter of this series.

It will be noted that when related action takes place in the two halves of the picture, as is often the case, some means must be used whereby the action may be properly timed with the corresponding action, or synchronized. This is done by noting the footage as indicated for each important action in the first run, then when photographing the second run, the actor is directed while the director watches the footage-dial. Thus the two actions may be perfectly synchronized, but the whole operation requires expert technique and painstaking care.

The work just described is the primary double-exposure, *i.e.*, splitting the frame. This is used in a variety of ways. One use is that required when one actor enacts two rôles, and in which these two characters appear upon the screen at the same time. The first exposure is made with the actor confined to one half of the field, then the film is reversed and the second half of the field photographed with the actor in that part of the field. The actions are synchronized as described.

At times, double exposure is used to eliminate certain objects, actors or portions thereof from a given half of the screen. A very good comedy effect is obtained by this means as follows: the lower right quarter of the frame is masked. An actor pursued runs to the right background and drops to his knees. Then he rises to his feet

and looks back at his pursuers and drops to his knees again. Then the corresponding mask is inserted and the masked quarter exposed on the empty set. The effect is such that when the actor running into the distance crosses the centerline of the frame, all of his body except his head disappears. Then the head disappears. The head reappears looking at the pursuers and again disappears. The fat man hiding

the double-exposure device. This work is usually based upon the fact that the film is impressed in direct relation to the amount of white in the background. Therefore, if a black background is used, a white object can be easily photographed upon it; but if a black object is photographed upon an already exposed white background the black object will appear as a transparent dark shadow. This is made use of in placing pointers



ILLUSION ON THE STAGE

HERBERT C. MCKAY

It will be seen that the last arch appears to be far more distant than the rear wall of the stage. The arches grow progressively smaller and give the illusion of great distance. This appearance is increased when none of the superstructure is shown.

behind a pole as described in "Kinematography for the Amateur" is a variation of this trick.

Again, it is desirable to introduce two distinct pictures in each frame. This is often the case in advertising and educational films where one side of the frame carries a regular kinogram and the other carries an explanatory animated diagram, text or other matter. This is done by simple double exposure; but no synchronisation is required and the two exposures may be made at widely separated points. A variation of this work is that in which the lower quarter or other fractional part of the picture carries a title or explanatory text.

Other double exposures are made by exposing two objects upon the same background without

upon maps and diagrams. The pointer can be easily seen, yet, does not obscure any of the detail of the map or diagram.

This is made use of in projecting ghosts, visions and so forth without masks. If an actor goes to sleep in a room with dark walls, the figures of his dream can be made to appear upon the darkened portion of the frame. In this case, a whole company can appear upon a mantelshelf, the figures can appear lifesize or a gigantic head can appear. Briefly, as the entire frame is exposed upon the first set and the visionary actors photographed separately, the relative sizes will be upon any desired scale. In this work incidental highlights of the background will appear through the bodies of the actors,

giving an appearance of unreality, yet they will have sufficient substance to be easily seen.

The technique of a dreamer who sees a duel upon his mantelshelf is: The dreamer is photographed asleep. At the back of the room stands the mantel. It is backed with dark wainscoting. The footage is marked or noted at the point where he falls asleep. When the scene is photographed, an extra foot or so is made for test and mask. This is hurriedly developed and dried. Then a mask is cut which will expose only the desired area of action. This mask is not essential to the work; but as the visionary actors are to be very small, it obviates the necessity for the immense black background which would be otherwise required.

With this mask inserted, the duellists, in light costumes are photographed against a dead-black background, using the film already exposed upon the dreamer. As the dark wainscoting affected the sensitive emulsion to a very slight degree, the highly actinic figures will be photographed perfectly. When setting up on the duellists, a frame cut from the test-negative is inserted in the mask slot, emulsion side outward, and the camera so placed that the duellists appear to be standing upon the mantel. This film is removed before the actual exposure is made.

The film is set at the point where the dreamer falls asleep. The duellists start action and the camera is faded-in. At the conclusion of the action, the fade-out is employed. When the complete film is finished and projected, the dreamer is seen to fall asleep, and upon the mantel two faint figures are seen. These fade into substantiality and fight, then gradually fade away into nothing.

In the case of a large head the same process is used except that no masking is required, for the size of the vision is such that only a few yards of black drapery will cover the entire field.

This will demonstrate one point. In the split exposure, where the background is exposed in portions with the action, the sizes of the actors must remain proportionate; but where the entire background is made at one exposure and subsequent exposures introduced as units the relative sizes may be in any desired relation.

One jealously guarded secret of trickery is the film-mask. Suppose that you wished to show an angel hovering above a house. You would make the test-film first, and one foot of this would be heavily overexposed so that the clear sky above the house would be absolutely opaque. You would also make a black print in which the house would be opaque. The highest grade professional cameras have a frame-punch sup-

plied as an auxiliary. These punches cut out a frame which exactly fits the aperture and every frame is cut so accurately that a set will register. The negative has one frame cut out and this is carefully cut along the line of the house. This mask is inserted in the aperture and the camera focused with it in place and so set that the house accurately fits the mask. The exposure is made. Then the dark print is obtained and a frame punched. This is trimmed like the first; but the sky is discarded and the house-print left as a mask. Then a clouded sky is photographed, the film rewound and the angel photographed against a black background. The completed film will show the house with a beautiful clouded sky above it and floating among the clouds the transparent figure of an angel. Such effects are beautiful when carefully done.

It would seem that such work would be instantly apparent upon the finished film, for all photographers know how difficult registration is, especially when hard lines of junction are employed; but there is one fact which makes this possible. The human eye does not perceive a sharp line at any great distance. The telephotographer knows the diffusing-effect of atmosphere. The pictorial photographer knows that anastigmatic quality in a photograph is an effect never seen in nature by the human eye. Except in objects at reading distance, the sharp line does not exist.

In modern theaters the screen is nine by twelve feet and larger. The screen itself has usually a grain similar to walrus-grain leather or very rough gravel-paper. The finest line upon the screen will be an eighth of an inch wide or more. At the distance of the usual spectator, a black line the size of the ruling in note-books would be invisible. In short, the distance gives a false impression of sharpness, just as the halftone-screen gives the false impression of uniform tones. In this, as in all movie work, success is founded upon illusion, not only psychological effects, but physical illusion founded upon the weaknesses of human perception. Many tricks are successful upon the screen; but when a still is made the effect is crude, very crude. So much for the vaunted needle-sharpness of the movies. We see it, I admit that; but nevertheless it does not exist. So, happily, there are no limits to the trickery possible.

Special masks are widely used in double exposure. These are masks cut from thin material and used in the mask-slot or masks made to fit in the mask-box. For example, a gateway is shown, a stone gateway of a Long Island estate. Through the gateway is seen an

Indian nautch girl dancing in a temple court. The gateway is photographed, but when the camera was set up, a sheet of glass was placed in the mask-box, and opaque applied to obliterate the garden seen through the gateway. When the scene is completed, a corresponding mask is made, the camera set up in the studio and the girl photographed.

Thus by the use of double or multiple exposure and multiple printing, which has already been described, any desired combination of actors and sets can be made, the relative sizes varied at will and any actor or object rendered transparent or opaque.

The use of visions, although based upon double exposure, are usually classed as a separate form of trick-work. Like straight double exposure, they are capable of infinite variation. Just as there are no new plots in drama, there are no new tricks; but new applications of old tricks provide us with endless amusement.

There are two great types of visions, the double-exposure vision and the lap-dissolve vision. I shall discuss the first here. The portion of the frame occupied by the vision is immaterial. It may be anywhere and of any shape. It may appear in the face of a clock or in a cloud of smoke. We shall consider the

upper, right-hand corner. A mask is made to obscure this portion of the frame, and the corresponding mask to expose this portion.

The scene is photographed up to the point where the vision is to appear. The actors remain immobile, while the camera fades-out. The film is rewound to the point where the fade began. The mask is inserted and the camera faded-in. When the fade-in is complete, or nearly so, action is resumed and carried out to the end of the vision, again the actors remain immobile while the camera fades-out. The film is reversed to the beginning of the fade, the mask removed, the camera faded-in and action resumed. Now, if we were to develop the film we should have a blank space fade-in remain for a period and fade-out; but such is not our purpose, so the film is rewound to the point at which the first fade started. The camera is set up, the mask to expose the vision portion is inserted and the vision photographed beginning with a fade-in. The fade-out is made when the footage-indicator indicates the fade-out of the vision-mask. The action must be so timed that this fade will come in right, for this fade *must* be made at the same point that the mask faded.

(To be continued)



CHEATED BLACKMAIL

HERBERT J. HARPER

HONORABLE MENTION—TABLE-TOP PHOTOGRAPHY

C'est la Guerre!

RALPH S. HERMAN



IN my twelfth birthday, my mother gave me an Eastman Bulls Eye number two. I can easily visualise that $3\frac{1}{2} \times 3\frac{1}{2}$ inch negative now. With that equipment, and considerable effort, I succeeded in recording quite satisfactorily many familiar scenes and diversified faces. Even all the illustrations for the school-annual that year were supplied by the Bulls Eye. From that time, amateur photography became my hobby, and I have ridden it quite consistently since.

Consequently it was natural for me to consider photographic equipment, when I received my orders for overseas service, during the time that my tendencies were frightfully militaristic. My first impulse was to include my Graflex in my duffle bag; but after talking to a few officers who had been over on observation-work, I decided on the Vest Pocket as being more practical. Accordingly the purchase was made, and the little camera, equipped with an F/7.7 anastigmat, became my daily companion, until through General Orders, the use of cameras was prohibited in the war-zone. During this period the Vest Pocket was safely parked in the bottom tray of my trunk.

I left New York with twenty-four rolls of film, and saw enough of interest to expose two rolls during the six-days trip over. Brest required an additional three rolls; yet, even then, I did not hesitate to lend one of my fellow officers six rolls. Incidentally he still owes me the six. After arrival at St. Aignon, I succeeded in getting myself relieved of the casual troop I had been attached to, and for the next eight months, I experienced a typical Cooks' tour. My films were exhausted the third week before I reached Tours. Blois had offered too many temptations. Tours is a city of considerable size, and held much of interest to the newly arrived. I succeeded in getting one roll of film from a Y. M. C. A. man; but the shops were completely out. During the next seven days, I visited Paris, and London, and was able to make only six exposures. I spent four hours searching for vest-pocket films in Paris, with no success, and one whole afternoon in London and found only one old roll. I exposed this roll very carefully on well-selected subjects; but when developed by a friendly Air Service photographer at the front, several months later, it came out a complete dud. The film should have been sold sooner.

The three months I spent in England, as a

consequence, gave me very little opportunity to make pictures. Matters improved upon my return to France, for by that time, mail from home was arriving nearly every week, and I received some dozen rolls of film in this way.

Later, while in Paris, I found five rolls, which I hoarded very carefully. After some few months, I found myself at the front, and personal cameras were very much against the rule. However, there were many interesting scenes and situations to be photographed after the Armistice, and my films soon disappeared. One trip through the front-line trenches, which the Germans had evacuated only a few hours, finished these. For several weeks following this experience, I was without "ammunition". One afternoon, while in Bar-le-Duc, I overheard a chap remark that he had found some films at a certain optician's. With a companion, equally as enthusiastic as myself, we hastened to this shop, and cornered the Bar-le-Duc vest-pocket film market within five minutes. However, it required an outlay of twenty-four American dollars to buy the two dozen rolls then in stock. The films, greatly to our surprise, were of German manufacture, and we were told that they had been smuggled into France from Spain. We used these films rather recklessly, fearing that their quality might be affected both by war-time conditions and age, but they proved to be quite satisfactory.

My experience with photography, while in the Army overseas, taught me at least one thing, and that was patience. Many of my films were not developed until ten months after the exposure was made, which, of course, is entirely against all the rules of Hoyle; and during this period, they were protected from snow, rain and ice, as well as the sun, only by a waterproof canvas and leather duffle bag. I have often wondered since how I succeeded in getting a single presentable print.

Development of my films in all cases was done for me by a friendly photographer attached to some Air Service unit, prints being out of the question, until many months later, when I again reached Paris. By that time films were available in unlimited quantities. Most of my pictures were obtained under very trying light-conditions, especially for the equipment I had at my disposal, and the little matter of obtaining the most desirable composition was usually impossible. My collection of about three hundred prints, made during my foreign service, are most assuredly a source of pleasure to me now.



A Serious Business

WILLIAM LUDLUM

Look pleasant! I tell you!
You'll make me real mad
If you keep on frowning
When you should be glad
I'm making your picture;
It may be a trial
To stand still a second;
But, please do, and—smile!

Look pleasant!—I'm scowling?
I know that is true;
But—how can I help it
When I look at you?
I really am happy,
Am laughing inside;
But my face must follow
As your features guide!

Look pleasant! Now, please do!
I'm serious, quite!
In making your picture—
I want it *all*—right!
If you keep on frowning
I fear I must say:
My camera's *not* working,
And bid *you*—good-day!

Enlarging by Daylight

CHARLES A. HARRIS

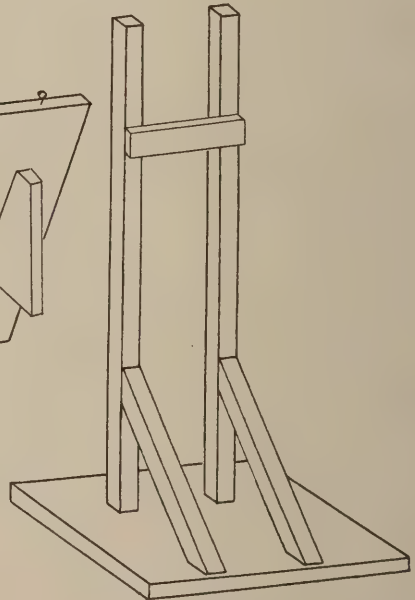
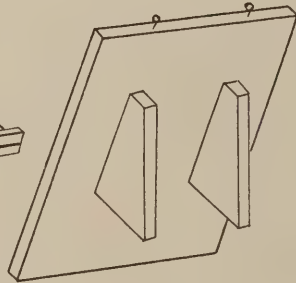
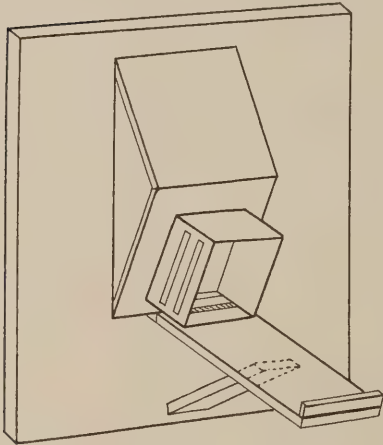


It has been accepted as an axiom that there is no best camera since its value to the owner depends upon a camera's adaptability to meet personal requirements. To some extent this is true of apparatus to make enlargements. According to Mr. Fraprie, in his little book "How to make Enlargements", a homemade window-enlarger is the equivalent in efficiency, on a bright day, of a high-class commercial outfit. Therefore, the inference is that the daylight method is superior to a poorly illuminated outfit which uses artificial light. It is a simple method to understand and to operate and for this reason suitable for the beginner's first efforts along this line. Booklets on this subject are easily procurable and so it will be necessary to refer only to certain improved methods that have turned out to be satisfactory.

A condition indispensable with the use of any

enlarging-apparatus is that the negative for projection shall be evenly illuminated. This, with the daylight method, has often been difficult of adjustment. The light from the sky which illuminates the lower half of the image on the easel is much stronger than that coming from below the horizon which illuminates the upper half of the same image. If opaque objects like a near by house or trees are included within the angle of light thrown upon the easel by the lens, there will be a resulting dark patch on the print produced. The suggested remedy for this usually consists of placing a large, white reflecting-screen outside of the window, at an angle of about 45° so that no direct light passes the lens, but rather reflected light from the sky overhead. Well, in my case there has always been wide, projecting eaves above the window which practically nullify this source of light.

If we now refer to the drawing, it will be noticed



APPARATUS FOR DAYLIGHT-ENLARGING

CHARLES A. HARRIS

that the camera, or at least the place for it, is tilted in such a manner that all of the light which illuminates the image comes from above the horizon or rather sky-line. The illumination is now perfectly even, the screen device may be dispensed with; and, moreover, one is enabled to use direct light, much stronger of course than reflected light. This should work out even with a fairly high sky-line, provided large objects are not too near, in which case a white cardboard on the outside of the window, slightly tilted, will exclude these objects and still permit the use of direct light. Also, to avoid the inclusion of objects below the sky-line, negatives used horizontally are better placed than vertically. A window which faces north, or nearly so, is always to be preferred.

Such a light enables the work to proceed throughout the day, if desired. If the worker will adopt the plan of making trial-exposures on a test-strip for each different negative, the matter of change in the intensity of daylight may be disregarded. Between the hours of nine and three, the north light is practically uniform for enlarging-work. It is possible to use windows facing east or west; but they are available for work only part of the day while the light is diffused. For approximately half the day, in either case, direct sunlight slants across the window, casting shadows and causing uneven illumination.

The main board of the camera-section extends across the window and should be placed as high as is convenient to operate the camera. This usually will bring the light-opening of the board above the central sash-frames and the lower rear edge of the camera about one and one-half to two feet above the surface of the table. The window above and below the board can be blocked by folding blue or gray army-blankets double and tacking them around the outer edges of the window casing. Some use heavy cardboard or building board—extra heavy—for such purposes which is easy to adjust if much work is to be done; but all must be so fitted as to make the window perfectly light-tight and entirely safe.

The easel-board is provided with triangular brackets attached to the back; and, when suspended upon the uprights, is induced to incline to the same degree as the camera-back. In the uprights several holes are bored about two inches apart and two brass screw-hooks provided, the board being shifted to required elevations by changing the hooks. At a given height the easel permits of a considerable range of work and frequently I run through a batch of assorted sizes without change. If the enlargements average, let us say, half the size of the board, it is immaterial as to the exact centering of the image upon it, just so that it is all there.

This arrangement, using the ordinary table, will provide for all average work with small lenses which no doubt will be mainly used; if for long-focus lenses, a special table or bench of the right height to bring the easel in line with the projection should be made a part of the equipment. In the construction, the only change from the conventional type is the casing built upon the board to provide to tilt the camera. This should be three or four inches larger each way than the negative-size to admit a good volume of light. The box-like affair on the front of this holds the negative and ground-glass and is of the shape and size of the camera back so that the two will fit together light-tight. By gluing narrow strips of wood on the inside, top and bottom, grooves may be formed to slide and hold the negative in place. The camera should be attached to use the negative horizontally. Roll-film cameras can be fastened with strong rubber-bands and the shelf below dispensed with. All joints in the construction, both front and back, have been made light-tight by nailing or gluing on thin strips of wood.

Provision is made for a ground-glass which I occasionally use with thin negatives and when the light is unusually strong; but this is not essential for the purpose of equalising the light. It is of interest to note that although ground-glass diffuses light which passes through it, yet, if used for the purpose of equalising the light above and below the horizon it has little effect.





A WINTRY NIGHT

STANLEY SHINER

HONORABLE MENTION—ARTIFICIAL LIGHT PHOTOGRAPHS

Camera Clubs are Trumps

GEORGE P. WRIGHT

TO “the old-timer”—the dyed-in-the-wool camera-clubbiter—it is inconceivable that anyone really interested in amateur photography, should fail to identify himself with a club when a good club is accessible. But statistics here in America would indicate that in about ninety-nine per cent of the cases this is true. Now, why is this true? Is it the fault of the camera club or the fault of the amateur?

And then again, in many communities where there are amateurs by the score, you will not find any sort of club or even group of photographers working together for their common good. Why is this? It certainly isn't because the amateur photographers do not like to exchange ideas and experiences; for, invariably, when two get together they begin to tell each other how they do their work.

There is no dearth of clubs which represent the other arts and crafts in America, so why should there be so very few camera clubs? Possibly there is no other single art or craft that could benefit so much by close association of kindred spirits and the exchange of ideas and

methods, as photography. There is no photographer, no matter how experienced, who could not gain by such an association and certainly there is no novice who could not learn more in one year of active work in a real camera club than in several years of individual study and experiment.

The small cost of club-membership should not deter anyone. Compared to many others, photography may appear to be a rather expensive hobby, but the savings to be effected by the knowledge gained in a club will save many times the dues each year. Surely it cannot be the expense that keeps the old clubs from flourishing and the new clubs from forming. Surely, also, it is not the lack of congeniality, for we Americans certainly cannot be accused of being bashful or undemocratic.

So why is it that Britain with less than one-half of our population has five and one-half times as many clubs? *The American Annual of Photography, 1925*, gives America sixty-three clubs; probably we have a few more than this unlisted. *Photograms, 1924*, gives Great Britain three hundred and forty-three clubs. Why is it that



A MICHIGAN VETERAN

ELEANOR F. JONES

HONORABLE MENTION—ARTIFICIAL LIGHT PHOTOGRAPHS

England so far outshines us in the matter of camera clubs, photographic societies and photographic enthusiasm?

I am convinced that the chief cause of this is, first of all, that most amateurs labor under the mistaken impression that photographic clubs are for the pictorial "high-brows" and advanced workers and they are afraid that their humble efforts will be subject to ridicule; second, the clubs do not advertise in the right way, if at all; third, the manufacturers and dealers do not co-operate with and help the clubs as they should; and, fourth, the photographic magazines do not play up the club angle as it should be played up and do not use their power to foster new clubs.

How many clubs really advertise systematically? By advertising, I do not mean newspaper or periodical space, but the taking advantage of every opportunity that offers for publicity. Very few, I am sure. How many avail themselves of the columns of the magazines to publish news of their clubs? Practically none. If a club

wishes to grow, to be a factor to be reckoned with in things photographic, it should by all means use every effort to get to the beginner the fact that, although he really is "green", he is the very man who should come into the fold and profit thereby. I know that there are a few of the older clubs that have reached the point where they do not wish more members, maintaining a closed organisation, or at least keeping their membership within a certain limit. These we need not consider. But the clubs that are small and unable to meet their monthly expenses should certainly make an appeal to *all* amateurs, for the beginners of today are the pictorialists of tomorrow, besides being mighty good material to help put a club on its feet.

What are the manufacturers and dealers doing to help the cause of the clubs? Probably they will say, "Why should we try to build clubs, and if we should, how can we do it? We are in sales-promotion, not in organisation work." Certainly they should realise that the more the

clubs and the larger the membership, the more business is bound to accrue to them thereby. I believe it is a low estimate to say that on the average a club-member will use easily ten times as much equipment and material as a non-member, for the simple reason that his club-work virtually demands results which necessitate the use of more "ammunition"; besides, his interest is always kept at its highest pitch, which makes for a greater use of material and equipment. In order to sell more advertising the big newspapers of today maintain a sales-organisation that will actually put a company's proposition on the market, even sending their own men out to call on the trade to accomplish this. If all this expense pays them, it is equally true that if the manufacturers and dealers would donate equipment and money, advertise and boost for the clubs, their efforts would be amply repaid. But do they? In my experience I am sorry to say, with one exception, they do not. Mr. A. H. Beardsley, in an article in the *American Annual of Photography*, 1925, says that some manufacturers and dealers think they are doing the magazines a favor to advertise in them. Our club has found that they think they are doing us a favor by allowing us to display an announcement of the club's program in their places of business. I make the prediction that one of these days they will understand the true situation and even ask the clubs to let them help; and the ones who do this first, will be the ones to get the club-business.

Now I'll take a rap at the photographic magazines. They certainly realise that the more interest that is aroused in the hearts of the thousands of snapshooters and the greater their desire to get into the pictorial class, the more readers they will have. The more they boost for the clubs, the more beginners they will start on the road to better and bigger work. Separately and collectively I can hear all the editors exclaim: "We are doing our very best now to get club-news and always give it space in our columns. The trouble is the clubs will not tell us about themselves. What more can we do?"

Mr. Publisher, it is up to you to sell the clubs on the fact that they *must* send in to your magazine news of interest about their clubs and that they should see that their members submit prints to your monthly competition, if for no other reason but to get their club's name before the photographic public. In order to foster the club-spirit, why wouldn't it be a good idea for at least one of the magazines to conduct a yearly contest for clubs, awarding a suitable cup to that club which submitted the best prints for the year? The details could easily be arranged.

Certainly this would arouse more interest in the photographic magazines and in the clubs also.

It is a slow and tedious, up-hill business to organise any club. It means that somebody has to do a lot of hard work for the mere glory of it; and it is usually in the face of many difficulties that a successful club is finally evolved. Oh, how many clubs have died aborning! It might be of interest to know how one club fought against difficulties and now in a short year's time is in the way of becoming a very successful club.

The Fort Dearborn Camera Club of Chicago was for some months merely an informal gathering of a very few kindred spirits. Finally, officers were elected and meetings were held under the trees in Jackson Park, which is situated some eight or ten miles south of the center of Chicago's business population. Owing to the inaccessibility of the meeting-place, it was difficult to get a full membership of even the few who belonged, and the club gradually disintegrated and finally ceased functioning altogether. But there was one man who determined that the club should not die—Ralph S. Hawkins, a former resident of Los Angeles and one-time president of the Los Angeles Camera Club. In May of last year he, and a few more determined ones, held a meeting and decided that the only way to get anywhere was to actually get club-rooms down in the "loop", Chicago's business-heart. Any kind of a room in this district carries a high rental; but the four or five members pledged themselves to prorate this expense until such time as the club was self-sustaining. It was argued that as soon as a comfortable club-room was fitted up and laboratory facilities were offered, where amateurs could have a convenient place to work, with all the necessary paraphernalia, we would soon have a sufficient number of members to make the club stand on its own feet.

This was accordingly done, and we sat back and waited for the members to flock in, reasoning that as the only other club in Chicago would accept no more new members, hundreds of serious amateurs would be glad of the opportunity to join us. We sent notices to the different photographic magazines, which they all very kindly printed for us and which resulted in several inquiries and a few members; but to our surprise and disappointment the new members did not flock in as we anticipated. It was very evident that if the Fort Dearborn Camera Club continued to exist we would have to take some active steps to get in more members.

The first thing we did was to get out some 11 x 14 bromide enlargements which called



ON NIGHT-DUTY
J. D. CREEGAN
HONORABLE MENTION—ARTIFICIAL LIGHT PHOTOGRAPHS

attention to the club. These were placed with as many of the local photo-dealers as would accept them. And here was where we received another great surprise. We thought certainly that all the dealers would be far-sighted enough to see that, as our club grew, their business would benefit in proportion, and that any advertisement they gave us would redound to their own gain. But we were rather disappointed. All promised to give these announcements a place of prominence, but only two did so.

Then we had some little leaflets printed, which we left in the different stores. Some were never distributed, but quite a few of them did some good. This all was encouraging, so, from time to time, we printed little announcements which we sent out to such names as we had. We still are doing this and find that it pays.

Finally, we grew to the point where our quarters were too crowded, so that we flew in

the face of Providence again and rented a larger room at twice the rental, putting us again in the position of having to "dig" each rent-day.

After we were fairly well settled, each member contributed a few of his best prints which were hung on the walls and we prepared for our "opening". *The Daily News* had just finished its photographic contest and to the list of winners we sent an announcement. We had about one hundred visitors at the opening and succeeded in getting the names and addresses of about half of them. To this mailing-list we send from time to time announcements of our programs, especially when we have something of unusual interest arranged. And by the way, our program-committee is always striving to arrange a program which will be interesting and instructive to the greatest number. Our largest growth has been due to this. As I said before, we find that it certainly pays in increased attendance, both

of members and prospects, to send out these announcements and a noticeable lessening of attendance is seen when we fail to do this. Therefore, we are planning to issue once a month a little club-organ which will set forth our program for that month and also any club or camera-news that might prove interesting.

A big feature of our club is our week-end trips to the beauty-spots around Chicago. Every holiday and Sunday last summer our members went as a party to these spots and not only enjoyed the fresh air and change of scenery

from the city's grime, but received some very valuable and practical lessons in pictorial landscape-work. We are planning this spring and summer not to miss a single opportunity to benefit in like manner, and are making an appeal to the amateurs in Chicago to join with us on these trips.

We attribute our success principally to the advertising we have done. Through the medium of advertising we expect to do, we hope eventually to become the largest and best camera club in America. A task, indeed; but not impossible.

Color-Rendering Without a Ray-Filter

CHARLES FRANCIS HAMILTON



HE demand by photographers from all ranks, for a plate that will give good color-rendering—without employment of a ray-filter—has caused plate-makers to put a number of so-called self-screen plates on the market. However, even this innovation has not been an unqualified success. Many leading pictorialists explain that to obtain entirely satisfactory rendering of the colors in monochrome, it has still been necessary to employ a filter.

A note in a British publication over a year ago, set us to wondering; and, being of experimental turn of mind, we decided to do a little investigating. Our aim was to discover the color-rendering properties of various plates, used with and without a color-filter. In looking over our stock of plates, we found Standard Orthonon, Eastman Panchromatic Cut Film and Kodak Film-Pack. The first mentioned is a well-known and a popular orthochromatic plate and may be considered a standard. The Panchro-film is rather new; and the orthochromatic properties of a film-pack have often been alleged to be only on the label.

However, we made a series of exposures. Our subject was a still-life group which consisted of a brilliantly colored lemon, an orange, a carrot, a tomato, a "pretty red apple" a green pepper, a turnip and a head of lettuce. First, the exposures were made of this group without filter, then with the use of a K2 filter. We were somewhat prepared, by the announced results of our British friend, for the resultant prints from that set of negatives.

Briefly, the Panchromatic emulsion showed itself adaptable to good color-rendering without use of a filter. The negative thus obtained excelled either of the other two similarly made,

and was practically equal to the negative on the Standard Orthonon plate, made with the K2 filter; and it was better, in every respect, except the rendering of the light-green lettuce, than the filtered film-pack negative. The only weakness was in the rendering of the greens; yet, it was necessary to correct the other emulsions with a rather heavy screen—K2—in order to excel the Panchro-film. Unfortunately we had no self-screen plates to try against the others; but our experience with them has been that they are no better, used without a filter, than a good double-coated ortho-plate, of which the Standard Orthonon has always been our favorite. Our conclusion from this experiment was that we could employ Panchro-films for general landscape and portrait-work, which we have done.

On the question of relative speed of the various emulsions, the following table, in which 1 is taken as a standard exposure, it will be seen that the Panchro-film, unscreened, is but little slower than par-speed portrait-films or plates; and, even with a light filter, such as the K1, is much faster; and, at the same time, it gives much better color-correction, than any of the other emulsions used under similar circumstances:

Emulsion	No. filter	K 1	K 2	K 3
Par-speed Portrait-film 1		3	20	**
Panchro-Film EK 1½		2	4	6
Comm. Ortho-Film EK 2½		8	40	**
Standard Orthonon (now				
EK Co. D.C. Ortho) 1½		4	20	**
Film-Pack 1		3	20	**
E. K. Polychrome 1½		4	20	**

Although our experiments were only with Eastman products; we feel certain that any photographer who makes the same experiment using the panchromatic emulsion made by his favorite plate- or film-maker, will find results equally as satisfactory as we have.



PAISAJE ROMANTICO

Courtesy Foto-Revista
JUAN GIESSELBACH

The Panchro-emulsion has been in the background for some time without plausible reason. It is now made fast enough for all purposes, and with good plate-tanks, good safe-lights and desensitiser, there is no reason that any photographer, amateur or professional, cannot employ it. For that matter, any photographer who cannot develop a plate in absolute darkness, should set about practising at once.

Our final word is that any photographer who desires a self-screen plate will find the panchromatic plate or film just enough better

than some advertised self-screen emulsions, to make its use in his work entirely worth while.

MEN do not do big things in dilettante fashion—they put their whole selves in their work, making all else subordinate. They unflinchingly accept martyrdom. They are willing to be jeered at—stoned with words—to suffer to the utmost if thereby they can spread their ideas. The cheap man thinks of business as an affair of making money. The fine man thinks of it as a service that demands his all. SAMUEL CROWTHER.



THE WHITE MOUNTAINS FROM INTERVALE, N.H.

J. D. HUNTING



EDITORIAL



Note Your Last Exposure!

CAMERISTS who are accustomed to use roll-film of a certain number of exposures—six, ten or twelve, as the case may be—are recommended to wind up the sixth exposure at once, and observe carefully if it be really the last one, and no more are to follow. The reason for making this suggestion is because it has happened that the camerist has proceeded in the belief that he was using a spool of only six exposures, and consequently wasted unused film; whereas either intentionally he had purchased one of ten or twelve exposures, or the dealer by mistake had given him one of that capacity. Of course, the better way is to assure himself, at the time of the purchase, of the exact contents of each carton, and then proceed accordingly.

When visiting the principal Kodak shop in Chester, England—situated in the famous Rows and conducted by Will Rose—to have his 3A Kodak repaired, the Editor witnessed a distressing incident. As the manager of the shop handed a customer his photo-finished roll-film, he remarked feelingly: "Very sorry, Sir; but your spool has yielded only six exposures out of a total of ten; four are absolute blanks. Pardon me, Sir; perhaps you forgot to expose the last four, or wound them up without exposing them." The customer appeared as if thunder-struck, then explained that he always used spools of six exposures; but when visiting Wembley, on a particularly crowded day, he had been unable to procure a six-exposure roll and hence accepted one of ten. In his enthusiasm, he had quite forgotten this circumstance, so when he had reached exposure No. 6, he instinctively wound it up, without troubling to glance at the indicator, and quite unconscious of the fact that he was reeling off also a lot of unexposed film, which, had he known, he could have used very advantageously, for very soon afterwards, the King and Queen appeared on the scene and he was without photographic ammunition. Asked if this incident was not an unusual one, the manager replied that, on the contrary, it occurred frequently in his experience. When selling roll-film of ten or twelve exposures, his clerks were instructed to caution consumers about winding up exposure No. 6.

Photography and Painting

THE title of this editorial does not suggest an antagonistic attitude of one side towards the other, as seems to be the case with the heading of the pungent article, "Photography versus Painting", published in May PHOTO-ERA. The writer of that article who, for well over a quarter of a century, has been an eminently enthusiastic and successful artist-photographer, takes the painter severely to task for his lack of technical and interpretive accuracy in executing a portrait. Whether obvious truth in a painted portrait is desired by either the artist or the sitter, is a matter that may not concern the average beholder, who, however, may express an opinion regarding its value as a work of art. The contemplation of a portrait of an eminent historical character, such as Queen Elizabeth, Cromwell or Napoleon, may give rise to doubt as to its truthfulness. Of Napoleon there exist several hundred different portraits. Not two of them are alike. Even the portrait-busts and statues of the great Corsican, executed by Canova, are idealised, and far from the actual truth; but they rank high as works of art, and are accepted by the multitude of admirers as faithful portraits. It is interesting to compare the numerous portraits by such vigorous interpreters as Velasquez, Dürer, Rembrandt and Sargent with those by Van Dyck, Reynolds and Gainsborough who would seem to have flattered their sitters. Be that as it may, painting and photography are sister-arts. The worker in each seeks to express by his own method, and in his own way, what he wishes to portray, and in doing this he is guided by the laws of truth, composition, harmony and beauty. Naturally, there are painters who, because of poor or inadequate training, commit errors in drawing or composition; and inasmuch as the painter and the photographer can learn much from each other, they should study the best of their respective efforts. The artist-photographer, on his part, should visit frequently the nearest art-museum. If he travel east this summer, he will find in any of the larger cities art-exhibitions well worthy his attention. In the summer-exhibition of the Boston Art Club—open till October 1—are pictures that exemplify the beauty of pictorial composition, whereas some others seem weak in this respect.



ADVANCED COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.



Prizes

First Prize: Value \$10.00.
Second Prize: Value \$5.00.
Third Prize: Value \$3.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already subscribers* will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes may be chosen by the winners, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, suitably engraved.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

All competition-pictures not returned are used to make up the PHOTO-ERA PICTURE EXHIBIT which is sent to schools, libraries, museums, camera clubs and to responsible organisations for exhibition-purposes, *free of cost*.

Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. Not more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered into competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

3. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. Prints may be mounted or unmounted.

4. Each print must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer, and printing-process. Enclose return-postage. Data-blanks sent at request.

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he shall have received official recognition.

6. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces is sent with data. Criticism at request.

7. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

8. Competitors who have won three first prizes within a twelve-month become ineligible to compete for prizes in this competition for two years thereafter.

Awards—Advanced Competition

Subject—Artificial Light Photographs

Closed May 31, 1925.

First Prize: F. Y. Ogasawara.
Second Prize: Y. Morinaga.
Third Prize: Dorothy Jarvis.

Honorable Mention: A. R. Brown; Walter P. Bruning; Esther R. Carrick; Chas. Clayton, Jr.; J. D. Creegan; L. J. Creegan; N. W. George; N. W. Goodwin; U. Stephen Johnson; Eleanor F. Jones; Dr. T. W. Kilmer; Edward D. Mudge; Leo A. Reinke; Stanley Shiner; Edgar S. Smith; J. Vildensky; Newton Wright.



Subjects for Competition—1925

"My Home." Closes January 31.
"Miscellaneous." Closes February 28.
"Indoor-Genres." Closes March 31.
"Table-Top Photography." Closes April 30.
"Artificial Light Photographs." Closes May 31.
"Miscellaneous." Closes June 30.
"Front-Cover Illustrations." Closes July 31.
"Real Sunrise and Sunset Pictures." August 31.
"Wild and Cultivated Trees." Closes September 30.
"Miscellaneous." Closes October 31.
"Lakes, Rivers and Brooks." Closes November 30.
"Interesting People and Places." Closes Dec. 31.

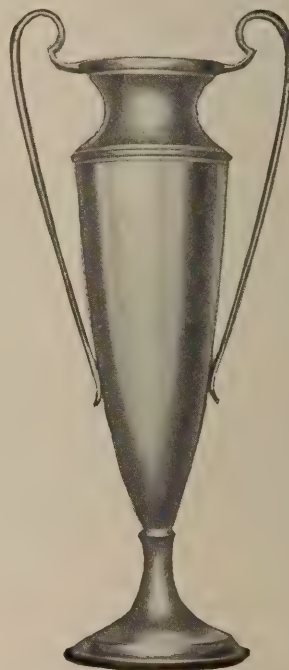


Photo-Era Prize-Cup



GIRL IN BLACK
FIRST PRIZE—ARTIFICIAL LIGHT PHOTOGRAPHS
F. Y. OGASAWARA



"WHEN NIGHT DEEPENS"

Y. MORINAGA

SECOND PRIZE—ARTIFICIAL LIGHT PHOTOGRAPHS

THE semi-silhouetted "Girl in Black", is pleasing in its Japanese design and treatment. The dainty, graceful figure and its accompanying shadow form one pictorial unit, which is well placed in the picture-area, although it might seem well to have more space at the right—towards which the girl seems to be walking—and less (by one-quarter of an inch) at the left. The uniformly black tone of hair and costume constitutes the most striking feature of the composition. Unfortunate, however, is the strongly emphasised, slanting base-line of the screen. Whether the cause is carelessness or deliberate design, is hard to understand. A screen is a substitute for a natural background and its presence should be carefully concealed or camouflaged. Also, I wonder if there is not too much free space over the figure's head—unless it was needed to accommodate the slender branches of an imaginary tree which seems to fascinate the "Girl in Black". The values of face, neck, and hands are good. A distinctly artistic feature is the faintly indicated shadow cast by the model.

Data: Made in the studio; 13-inch Vitax; stop, F/6; artificial light and spot-light; 2 seconds; Super Speed Portrait Film; Glycin; print, Rapid Black J.

"When Night Deepens"—a pretty and imaginative title—does not seem to suggest the physical condition which necessitates artificial illumination. Lamps are usually lighted in places that are beyond the reach of daylight. Thus, here may be a hall or a room which can be illuminated only by electric light. But by referring to the data, which fortunately are complete, one discovers that the exposure was made at night. A more appropriate designation, here, would be appreciated by the interested beholder. All the same, the picture exemplifies a well-lighted interior. Moreover, it possesses fine pictorial quality, is simple in composition and with what is doubtless meant to be the main object of interest—the cluster of electric lamps—very wisely placed in the upper right corner of the picture-area. The design is decorative, in a way, and, being severely plain, it contains no intrusive object. The artist seems to understand the laws of balance very well.

Data: Interior of Union Station, Seattle; February, 10 P.M.; $2\frac{1}{4} \times 3\frac{1}{4}$ Kodak; $4\frac{1}{2}$ -inch Kodak Anastigmat; stop, F/6.3; 30 seconds; Eastman roll-film; Pyro-Acetone; enlarged on Vitava Rapid Black E.

Even though "Boy with Rabbit" is a photograph



BOY WITH RABBIT (AFTER RAEURN)

DOROTHY JARVIS

THIRD PRIZE—ARTIFICIAL LIGHT PHOTOGRAPHS

of a living picture, I should be tempted to call it a portrait; for Raeburn and his English cotemporaries often painted their sitters with some animal pet. Dorothy Jarvis is one of the few professional photographers in Greater Boston who has shown marked advance during the past few years. Moreover, Mrs. Jarvis has developed a charming individuality in her work, which is evidenced even in the few examples of her activity that have appeared in this magazine. Sensitive, refined, womanly, yet never weak or conventional, but marked by true artistic feeling and competent technique, are the qualities that to me are the most pleasingly noticeable, and which are also reflected in her present picture. Dorothy Jarvis believes in striking out for herself and obtaining original subject-material.

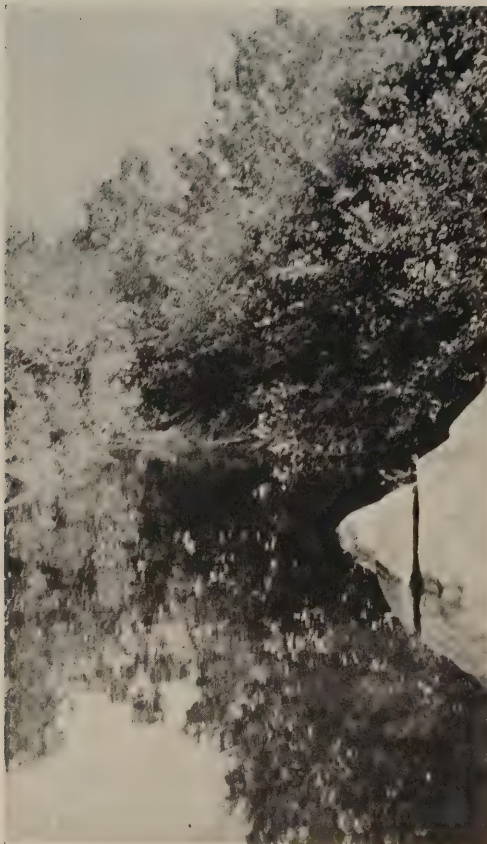
Data: One of a series of living pictures arranged and shown in the parish house, Church of Our Saviour, Longwood, Mass.; April 1, 1925; at 9.30 P.M.; 2800 watt lamp; 4 seconds; $3\frac{1}{4} \times 4\frac{1}{4}$ Graflex; 6-inch Bausch & Lomb Tessar; stop, F/4.5; Eastman Super Speed Portrait Film; Activol; projection-print on Dassonville Charcoal Black; Halldorsen lighting outfit used with 200 watt light on another stand. "The bunny was alive, as well as the boy!"

WILFRED A. FRENCH.

The Camera in Schools

It was only to be expected that alert and progressive education authorities, with the approval of the Education Department, should experiment upon the value of wireless installations in their schools. So far, the reports on the experiments can by no means be described as favorable. More successful has been the employment of the gramophone as an aid to education in music and languages. Most successful of all has been the introduction of the optical lantern into large numbers of schools of all grades, and, as a sort of corollary, instruction in the use of the camera, and in the theory and practice of photographic methods. In many cases it has been recognised that "photography," as a definite "subject" of the curriculum is of exceptional educational value—almost ideal as regards its scope, and its efficiency in the simultaneous training of hand, eye and brain. It would be well if "the Royal" in its official capacity could emphasise this aspect of the subject with the Ministry of Education. The Royal Photographic Society carries weight possessed by no other institution, and is obviously the one body to bring the claims of photography before the authorities, especially in connection with secondary schools.

The Amateur Photographer.



WHAT ANIMAL IS IT?

F. A. CROCKETT

Heads, Faces and Shapes in Rocks

Editor PHOTO-ERA MAGAZINE:

THE article in January PHOTO-ERA MAGAZINE by Charlotte B. Dunlap, illustrated with two pictures just naturally "got my goat," if the Editor will permit a slang phrase to pass.

I am something of gentleman enough to wish to compliment her on her success in getting "shadows." In fact, these pictures caused me to look sharply at one I obtained in New Hampshire last summer, while on a scouting expedition after something that looked good for postcards.

I had just made a picture of the old swimming-hole, with a trio of young bathers wearing old overalls—the young lady with the same gingham dress she had been wearing around the village—when I happened to glance up stream. The view looked good and click went the shutter.

It was not until the print was made and Friend Wife, who acts as both art-critic and censor, wanted to know what the animal was and which side up the picture belonged, that I noticed anything peculiar. When held right-end up, the rock on the right bears a strong resemblance to the head of an animal. Reverse positions and the head of another animal appears.

No doubt there are thousands of places in the United States that furnish likenesses of humans or animals.

"The Old Man of the Mountains" and "Whiteface" are two in New Hampshire that have received much attention from photographers and sketch-artists. "Whitehorse Ledge" in New York has received some attention from sketch-artists; but I have never seen a photograph of it, notwithstanding the fact that it may be photographed.

I haven't been in that section for many years and then didn't care anything about cameras anyway; but as I remember the section, I could go back there with my Kodak and get some of the most beautiful pictures one ever saw. I realise fully that a picture made from the spot where I stood for several minutes, admiring the view, would not appeal to me as the eye-picture did because the eye can cover a range the camera can not. It is one thing to stand on a bridge and look upstream for half a mile or so, watching the water come tumbling over rocks, with high cliffs on one side and wooded hills on the other and something altogether different to get a good picture of it. I know my F/7.7 wouldn't do it.

I wonder if the Editor knows that the first halftone printed in the State of New Hampshire was made from a photograph of Lake Waukewan and was printed across the lake from his Wolfeboro office, in the little city of Laconia. In those days Laconia was not a city, and summer-camps and cottages around that beauty-spot were conspicuous by their absence. It was also in the days when the Steamers "Mt. Washington" and "Lady of the Lake" brought all the visitors to Wolfeboro and Center Harbor. Squam Lake had one lone summer-cottage and the famous Mt. Livermore House was known as "Frank Jewell's Farm."

F. A. CROCKETT.

MASSENA, N.Y.

Wayside-Photography

THE question, "How can I make my camera pay?", has found expression in so many, various ways, that there scarcely remains a means that has not been exploited. Friendly photographic "hold-ups" are resorted to by camerists in England, on holidays, with seemingly good results; and the practice is one that might well be followed by enterprising camerists of the thrifty sort, in America; only it requires a certain amount of courage.

For instance, when a char-à-banc or sight-seeing omnibus, shortly after it has left its station in some large city or at some popular summer-resort—like Weston-Super-Mare, Somerset, England, which I visited last June—has reached a pretty spot along the road, a camerist approaches from his business-stand, signals the driver, who stops his 'bus, and the passenger who occupies the farther end of each seat is politely requested to rise, face the camera and smile, which he cheerfully does. After the camerist has snapshot the char-à-banc and its occupants, he expresses his thanks, and the 'bus proceeds on its way. In about two or three hours, when on its return-trip the char-à-banc reaches the place of the hold-up, the photographer is ready with the requisite number of successful snapshot-postcards, at six pence (twelve cents) each. He usually disposes of them all. When the number of the passing 'buses is large—and it always is when the weather is fair—the camerist does a thriving business, from twenty to thirty dollars a day, on which his profit cannot be less than fifty per cent. It is cash on delivery, and there are no overhead-expenses—unless the camerist has to bear the cost of a license and a fee to the driver of the char-à-banc.

W. A. F.



SUBJECT FOR NEXT COMPETITION
ADVANCED WORKERS



BRONX RIVER—AUTUMN

FRANK O'NEIL

**Advanced Competition—Wild and
Cultivated Trees**

Closes September 30, 1925

It has been some time since attention has been given to the subject of trees. There may be a difference of opinion as to the suitability of some material for camera-studies; but I venture to say that most readers will agree that wild or cultivated trees offer beautiful and striking subjects. From the towering, symmetrical elm to the little trimmed evergreens on some large estate, there are many species of trees which lend themselves readily to pictorial composition. It should be remembered that all trees, wherever they may grow or be grown, are eligible for material. This fact ought to meet the convenience of our readers whether they be in the city, at the seashore or in the mountains. Virtually all cities now have beautiful parks, which

have trees of many varieties, so that it is not necessary that the contestant who lives in the city should feel obliged to travel far for good material.

To be sure, the jury will expect good composition and technical workmanship; but, in addition, let me suggest that all contestants strive to include something of the poetry or romance of the trees. This may sound a bit strange; but from long contact with nature in many moods—in calm and in storm—I feel that there is something almost human about trees. They seem to be gay, sorrowful, angry and friendly according to the seasons and the weather. To portray some of these seeming moods of the trees will tax the skill of the worker; but it will add much to the pleasure of the true artist. As I write these lines, I am looking at a handsome, symmetrical maple-tree which seems to be nodding to me in the sunshine and saying, "That's right, make your readers tell the truth about us".

A. H. BEARDSLEY.



BEGINNERS' COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U.S.A.



Prizes

First Prize: Value \$5.00.

Second Prize: Value \$2.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already subscribers* will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes, chosen by the winner, will be awarded in photo-materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

Rules

1. This competition is open only to beginners of limited experience with practical camera-activity, and whose work submitted here is without any practical help from friend or professional expert.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints and enlargements up to and including 8 x 10 inches.

4. Prints representing no more than *two* different subjects, for any one competition, and printed in any medium except blue-print, may be entered. Prints may be mounted or unmounted, as desired. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

5. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail.

6. Each print entered must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent at request. Criticism at request.

7. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he has received official recognition.

8. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with data.

9. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

Awards—Beginners' Competition

Subject—Miscellaneous

Closed May 31, 1925.

First Prize: Leroy Mellinger.

Second Prize: Irving Singer.

Honorable Mention: Moe R. Cheskis; Michael Curcio; S. Hatsukami; S. Horino; Stanton G. Long; Paul L. Miller; Chas. M. Philbric; Lt.-Com. Karl S. Smith; Irving Sparks; Elmer P. Trevors; Alfred K. H. Wong.

The Beginner and Record-Photography

A RECENT letter from an old subscriber furnished the subject for this little article. It seems that the constant urging to make artistic pictures rather than record-photographs prompted this subscriber to make the point that, after all, record-photographs do have their rightful place. It seems to me that he is correct. Of course, it is assumed that the record-pictures to which he refers are well done technically. As a matter of fact, industry owes much to the record-photograph, and so does science. There is a tremendous field of photographic activity which has nothing to do with art as the pictorialist knows it. Certainly most applications of photography to medicine, engineering and business in general cannot be considered artistic. Yet, how very important these record-photographs are to the progress of modern civilisation. Hence, I am glad that our subscriber brought up this matter.

As I see it, the record-picture serves a purpose in the photographic growth of the beginner. When he first obtains a camera he usually has enough to think about without including the study of composition. If he can make a good record-photograph of his dog, he has made a definite advance and is to be congratulated. There are many who have cameras who cannot even do that, let alone make a well-composed picture of a dog. Is it not true that all of us began our photographic experience by making record-pictures? Certainly, by looking over the first few dozen pictures that we made with our first cameras, we cannot claim much artistic merit for them.

Some of us never do anything better than to make good record-photographs. To be sure, we make them technically good; but how many of our pictures really may be called artistic? In my opinion, a well-made record-photograph is to be preferred to a poorly made pictorial study. I wish that the thousands of snapshooters might make really good record-pictures. What a gain it would be for photography!

Often, in criticising pictures submitted to our competitions the term record-photograph is applied to a print. No doubt this term tends to make the contestant feel that his print possesses little merit. Perhaps, we have unintentionally given this impression. Really, it should be made clear that a record-photograph may show great photographic skill without being particularly artistic. There may be too much emphasis placed on the pictorial. When it comes right down to the point, there are thousands of record-pictures made where there are hundreds made for pictorial purposes. Virtually all photographic magazines give more space to pictorial photography than to record-photography.



THE CHICAGO RIVER

LEROY MELLINGER

FIRST PRIZE—BEGINNERS' COMPETITION

Perhaps this is as it should be, and the artistic side of photography should receive the greater attention. However, the fact still remains that pictorial photography interests the minority and not the majority. One has but to do a little investigating to find that this is true. Although the *National Geographic Magazine* often publishes exceptionally beautiful artistic pictures; yet, most of the illustrations really belong in the record-class. They are so well done that they appeal, even though the artistic may find much to criticise in them.

Therefore, let the beginner not feel that he should be ashamed of a good record-photograph. Rather let him be glad that he can make one. When he submits such a picture in a competition which is designed to bring out the artistic skill of the contestants, then he will do well to try to master the fundamentals of composition. To do so will improve the possibility of his winning a prize or an Honorable Mention. However, when his print comes to be criticised and it is called a good record-picture, let him not feel discouraged for he has done more, then, than many who cannot even make a good record-picture. The fact remains that before a pictorial picture can be made, most of us have to learn how to make a good record-photograph.

A. H. BEARDSLEY.

Beginners' Competition

"THE CHICAGO RIVER" makes a strong appeal despite the fact that the film was underexposed. It is an extremely effective picture, and does credit to the artistic perception of the photographer. These strongly marked oblique lines, accompanied by numerous highlights in the sparkling waters and meeting the steam-barge, in the distance, are a daring and impressive feature of this unconventional composition, which certainly is alive with interest. The line of buildings, far away, has been well controlled and forms a successful background to this animated scene. Too bad, that the print was not properly trimmed—to overcome the slanting water-line!

Data: June, 1924; 2 P.M.; very bright sunshine; Eastman No. 1A Autographic Kodak, Jr.; Bausch & Lomb Anastigmat lens F/6.3; Ilex Shutter; stop, F/6.3; K-2 color-screens; 1/25 second; tray-developed according to Eastman formula; enlarged on P. M. C. No. 7.

Irving Singer's "Washington Bridge" is a boldly executed piece of photographic work, well proportioned and well thought out. Not having seen this bridge, I am unable to state definitely that the farther end is not plumb. Appearances would seem to indicate, however, that in reality the great piers at each end



WASHINGTON BRIDGE

IRVING SINGER

SECOND PRIZE—BEGINNERS' COMPETITION

of the great span, pictured here, are *perpendicular*. It is a little difficult, I suppose, to hold a small camera during the exposure so as to obtain always a correctly rendered picture of an architectural subject. Now that Mr. Singer has been given a gentle, friendly hint, I suppose that in the future he will exercise greater care in using his camera.

Data: No. 1A Autographic Kodak, Jr.; stop, F/11; 1/25 second; tank-development; enlarged on Royal Bromide.

WILFRED A. FRENCH.

"Oh, for a Kodak Film!"

EVERY traveling camerist knows the importance of being provided with an adequate supply of sensitive material—plates, roll-films or film-packs. If he happens to be in a large city—anywhere on earth, except, perhaps, in Russia or China—when he suddenly discovers himself sadly in need of a roll-film, he will generally find a shop or drug-store (in England, a chemist) where the desideratum is stocked. At popular seaside or other summer resorts, in the principal countries of Europe, the camerist can always be accommodated, although the novice is often apprehensive when he has "fired his last shot". This, I found to be the case at such resorts as Clovelly and Lynmouth, either of which is a veritable paradise for the appreciative camerist. Each of these nature "picture-galleries" presents an infinite number of alluring pictorial opportunities. At every step, forward or sidewise, the camerist beholds a new and bewitching picture. Never, in the experience of all my travels abroad, have I been impressed with so great a variety

of views and scenes that cried to be photographed, as in the above-mentioned two summer-resorts.

On the day I visited Lynmouth, of Lorna Doone fame—June 1, "Whit Monday", a special holiday—the streets were packed with sight-seers, on foot and in motor-cars, so that locomotion either way was difficult. The click of a shutter in the hands of a camera-enthusiast was audible to the sensitive ear. I never saw so much snapshooting before, anywhere. Now and then, was heard the cry, "My Lord! Here goes my last exposure, and no more film!", or, "I've got to have another Kodak film!" My practised eye caught sight of a familiar swinging sign in front of a shop, that of a chemist. Out rushed one after another, wearers of happy faces. They had found what they wanted. Though I personally was well provided, I stepped into the chemist's shop. Such a prodigious sale of long, yellow boxes (Kodak film) I had never before witnessed. The proprietor was far-sighted. He had put in an immense stock of roll-film several days before, and hence reaped the benefits of an enormous, but not unexpected, sale, amid expressions of gratitude from countless patrons.

W. A. F.



ONE way to mount pictures with paste is to obtain a large piece of plate-glass, collect the prints from the wash-water and place them face down on the glass—one on top of the other. Then apply the paste to the topmost print with a large brush—being careful to cover all corners thoroughly—lift the print from the pile and mount it. Continue to do this until the last print is reached. If the pile is not moved the paste will not reach the picture-side of the prints.



OUR CONTRIBUTING CRITICS



TWILIGHT ON THE HUDSON

IRVING SINGER

THE PICTURE CRITICISED THIS MONTH

Whoever sends the best criticism (not over 200 words) before the last day of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

THREE questions instinctively arise when we see a picture like the above, namely, What? When? Where? The print should answer them fully, but "Twilight on the Hudson" answers none of the questions completely. What is the picture? An evening-scene on the Hudson, of course. Yet, it lacks that fundamental—a central point of interest. The sun might be, but there are too many distractions. Besides, we cannot identify the dark objects in the background. When was the picture made? Indeed, the title says twilight, but twilight is that period of daylight after the sun goes down. The celestial body, according to this definition, could be neither the sun or the moon! Therefore, the title should more properly be, "Sunset on the Hudson."

Where are we? The framework in the foreground dazes us. It is very confusing as well as distracting. Whether it be a pier or the wreck of Columbus' flagship, the picture would be greatly improved without the adornment. Moreover, the masses of light and shade are entirely unbalanced and the print is the victim of faulty exposure. Despite the above criticism, Mr. Singer should be commended for tackling what many seem afraid to do—photographing toward the

sun. My advice is: Catch Old Sol in the same solemn mood, and try again, watching carefully the composition and exposure.

ARTHUR L. MARBLE.

THE title is unfortunate. Twilight means the light reflected from the clouds that are lighted by the sun which is below the horizon. Consequently, unless we are to imagine that the celestial body staring at us is the moon, the effect cannot be twilight.

The foreground is about as unpoetic as possible: such an ugly, shapeless structure of planks and beams! But worst of all is the mass of white in the right foreground. What is it—a chunk of ice? No, it does not seem to be floating on water as ice does. It cannot be the spoon of an oar; it is too big for that. What can it be? Nobody can tell. All in all, the picture is an atrocity—as it is now.

But let's perform a surgical operation. Take a card and cover over the lower half of the picture. I would go so far as to cut off the shadow of the boat, or whatever it be, on the left. I can't say that I like that tilting steeple, or whatever it is, to the left. It is probably the fault of the lens and cannot be remedied. I should also work on the back of the negative to reduce the slight streak of sun reflected in the water, even when amputated as suggested. That streak of white at the right might be toned down just a hair; it looks too much like broken floating ice.



GRADE-CROSSING AHEAD

PAUL L. MILLER

YOUR CRITICISM IS INVITED

Thus trimmed and reduced judiciously, we have a picture with quiet dignified horizontal lines in keeping with the scene—a picture no man need be ashamed to hang in his study. Personally, I should be tempted to try a little Farmer on it to clear it up a bit and I should certainly give it a different title.

E. L. C. MORSE.

[Although our good friend, Mr. Morse, may seem to be a bit harsh, he is not so fierce after all. We have an idea that what looks like ice, is ice; and we hope that Mr. Singer will set us right. EDITOR.]



Selection

ALL the meaning and force that any picture can have, must, in the last analysis, issue from the process of selection and elimination, says J. Garnett Harper in *The Amateur Photographer*. Indeed, it is this very process of selection and elimination for which the frame of the picture stands. The whole meaning of any enclosed space, whether it be prison, park, or picture-frame, is not merely that it encloses, but also that it excludes. The prison encloses the prisoner; but it also excludes his fellow-men. The park encloses a formal version of Nature; but it also excludes a free version of Nature. And the picture-frame encloses the subject of a picture; but it also excludes the subjects of many other pictures.

It is one of the strange paradoxes of art that the more creative the mind of the artist is, the more destructive must it ultimately become. If the artist has a number of ideas to rub together, he must eventually rub most of them out, lest they all cancel out; he may consider the whole universe, but he must finally decide what part of the universe is particular to him.

It is strange that the two schools which are most sharply divided in other respects—the schools of the realists and of the imaginatives—are the least sharply divided on this question of selection; and the realists are forever crossing the border line in forgetfulness of the principle to which they are sworn. It may be clear

that the difference between the schools is a difference about fact and fancy; but apparently it is not clear why, if a thousand facts can produce one fancy, they cannot produce one feeling.

The difference is, crudely, this: that a realist is a man who could take infinite delight in the feeling of, say, a cup or vase in his hands; but an imaginative worker takes infinite delight in the feeling that the cup or vase creates in his mind; and, for some strange reason, feelings that are created immediately in the mind are called fancies. The imaginative worker, therefore, need not be so restricted in his subject, because he must be restrictive in his feeling; he must reproduce one mood as the realist must reproduce one cup or vase; but he may use many cups or vases to do it.

To the realist, all things create the same feeling; they all invoke a full-blooded and rich enjoyment of life; the infinite variety of the realist is the infinite variety of facts; so that he must select out of a multitude of facts the one that most pleases him at the moment. But, to the imaginative, all feelings can be created by the same thing; the infinite variety of the imaginative is the infinite variety of feeling; so that he must select out of a multitude of feelings the one that most influences him at the moment.

The important thing the realist has to remember is that his picture cannot have the same scope in facts that the picture of the imaginative can have; and this, simply because the picture is concerned chiefly with facts. Because the background of the realist's picture is feeling—the feeling of literally taking life between the hands—the realist must be selective in his facts, so that we may be suddenly surprised, by a loving reproduction of a cup or vase, for instance, into a clear-eyed and breathless appreciation of what the world would look like if we did not mould it in our own minds.

And because the background of the imaginative picture is fact—the solid fact upon which alone fancies can be profitably based—the imaginative must be selective in his feelings, so that we may be brought to a full understanding of the fancy which can bend all facts to its will.



OUR ILLUSTRATIONS

WILFRED A. FRENCH



WELL, it feels good to be back at my desk again; to attend to my editorial duties, helping to judge competition-pictures, and to comment on our illustrations. During my absence in Europe—April, May, and June—"Our Illustrations" was conducted ably and conscientiously by Ernest H. Washburn, who is an experienced camerist, sound critic and entertaining writer. This offered PHOTO-ERA readers a pleasant diversion; but I hope that my return in an editorial and critical capacity will find them in a receptive and sympathetic mood. My task is not an enviable nor an easy one, and yet it is not without moral compensations.

The frontispiece is by a worker who is a firm believer in straightforward photography, every i must be dotted and every t crossed. There must be no deviation from what the sharp eye of the camera sees. As an artist in photographic portraiture, Mr. Cutting uses lenses specially adapted to this class of work, where he has shown ability of the highest order and acquired an enviable reputation. In the present landscape, he clings to a method of expression that is suggestive of former days when a print was not considered satisfactory unless the definition was extremely sharp from corner to corner, and from the nearest object in the foreground to the most remote in the distance. Those who prefer this style of pictorial rendering, will find great delight in gazing on the scene which Mr. Cutting has reproduced with the utmost care and fidelity. The poplars are worthy objects of his technical skill, and the road-way is not without its pleasing lights and shadows. The branches of a nearby tree, however, seem to threaten the addition of a supplementary picture, with the roof of a house as its principal object. This diversion saves the picture from being too symmetrical in design, although the photographer took pains not to place the camera in the middle of the road. Happily, too, the nearest part of the foreground is in shadow. The view is well spaced and a smiling sky suggests the delight of a summer-day.

Data: Tamworth, N.H.; August; 11 A.M.; bright light; $6\frac{1}{2} \times 8\frac{1}{2}$ Century camera; 14-inch Voigtländer W. A. Euryscope, rear lens only used; small stop; $\frac{1}{2}$ second; Stanley plate; hydroquinone; Artura Iris, C.

"The Springtime-Girl", page 64, is not without a degree of charm. That the theme offered unusual technical difficulties, must be obvious to the observer; yet they were met successfully. There are some, doubtless, who would prefer that this charming scene had been laid in the open; but it was given a place indoors, where it could be photographed by artificial light. The somewhat spotty effect—caused by the flowers catching the light—detracts not a little from the attractive model, whose grace and beauty of attitude are engaging. The folds of the dress held daintily by the girl's right hand have also caught an excessive amount of illumination, inviting the eye of the observer in that direction. Otherwise, the tonal quality is excellent.

Data: Made at home with a F. & S. Home Portrait-Camera (Eastman); Wollensak Verito lens at F/6; 1 second; Eastman 8 x 10 Par Speed Cut Film; tank-

developed according to Eastman formula; contact-print on Artura Iris D; artificial lighting.

The character-study, page 65, entitled, "Today's Paper", is more convincing, although the subject appears to be cold—note that he is covered and his neck is well protected—and he sits there in his shirt-sleeves! The artificial illumination, whatever its source, is well distributed, so that the clearness, and particularly the modeling of face and hands, leaves nothing to be desired. Good lens-work, here! The attitude of the sitter and his leering eye might lead the observer to infer that our friend is interested in the financial columns of his paper.

Data: 11 x 14 Ansco camera; Vetax F/3.8 lens; 16 inches focal length Eastman Par Speed Cut Film; pyro-soda; print, Azo No. 2B.

The titles of the stereographs on pages 67 and 69 are as follows:

No. 1, Base of flag-pole, Public Library, New York.
No. 2, Prehistoric skeleton, Museum of National History, New York City.

No. 3, Giant lizards, ditto, ditto.

No. 4, Under the Christmas Tree.

No. 5, The parade.

No. 6, Walkins Glen, New York.

No. 7, In Prospect Park, Brooklyn, New York.

No. 8, At Bear Mountain, New York.

The work performed by the Wild Life League, as described by C. M. Campbell, pages 72 to 77, deserves the fullest support of the creatures it seeks to protect. As a member of this admirable organisation, Mr. Campbell performs valiant service, and occasionally makes camera-records of bits of scenery that make a personal appeal to him, and that will help to impress his fellow-members and friends with the importance of the task in hand. I do not think, however, that he seriously considers his straightforward camera-efforts as examples of artistic photography; for he may have neither the time nor the inclination to bother with the laws of pictorial composition, tonal values, and surpassing technical excellences. Our readers, as well as myself, are glad enough to hear his very interesting story, study his selected pictures of forest and stream, and unanimously admire his zeal and devotion to a noble cause.

Data: "Breath of Summer"—page 73; June, 11 A.M.; bright light; 5 x 7 Seneca view-camera; 8-inch Seneca Convertible lens; F/16; Kodak sky-filter; $\frac{1}{5}$ second; Polychrome plate; pyro-soda; Azo print. "Paddle Your Own Canoe"—August, 2 P.M.; intense sunlight; camera and lens as above; $\frac{1}{25}$ second; Stanley plate; M.Q.; Velox-Gloss print.

PHOTO-ERA has published, in recent years, many admirable photographs of living wild birds, including specially several groups of owls, by Dr. J. B. Pardoe, and our vivid recollection at once establishes a comparison between those achievements and the commendable effort of C. M. Campbell, page 74. If the "Screechers" are of the white or light gray variety, the picture displays good technique. Also, the character of the background is still distinguishable, as of necessity it suffers when the principal object is photographed at close range, as in this instance.

Data: "Young Screech Owls"; made in Franklin, Pa.;

May, 5 p.m.; bright light; 5 x 7 Seneca view-camera; 8-inch Convertible; stop, F/16; 1/5 second; Polychrome plate; pyro-soda; print, Azo K. No. 3.

"In Winter-Pastures", page 74, has the outstanding merit of being admirably grouped—not shown as if some of the animals were about to walk out of the picture. No data are given; but it is safe to say that no sunlight prevailed to impart a little more life and interest to the scene. The tonal values have been well rendered; but the snow, largely because of the absence of sunlight, lacks character and interest. Had the camerist been standing higher, or able to raise his camera, during the exposure, there might have been more separation between the sheep and the woods.

A picture like "Setter Pointing", page 75, is made often in haste. Deliberation in making the exposure is out of the question in these circumstances. Nevertheless, Mr. Prall deserves praise for having done so well. Personally, I like the setting in this picture. It is sufficiently distinct to reveal its character, and is well subordinated to the subject which, despite a slight departure from absolutely clear definition, stands boldly relieved against the surroundings. Apparently, no great attempt was made to avoid placing the setter exactly in the center of the picture.

The author of "The Kill", page 76, succeeded in obtaining an admirable group of a scene, in which he may have been a participant. Here, too, a pictorial composition, though possible, was probably not in the mind of the camerist; but the general arrangement, with two dark masses at the feet of the two sportsmen, and in the foreground, is appreciated by the critical beholder. A little less haste in the making, and, perhaps, the background might have been rendered more pleasing in definition. No data.

In "Snowdrifts", page 77, one observes the altogether common tendency to underexpose snow-pictures. Here, it would seem as if the snow-shovelers were of paramount interest. Fortunately, there are sufficient gradations in the heaped-up snow to enable it to assert itself. The silhouetted tree, although not very ornamental in its present state, helps to break up the dull-looking sky. The human interest would still have been preserved, had the shovelers bent to their tasks while the scene was being snapshot; but there is no denying the truth that they are properly distributed.

For data concerning "Illusion on the Stage", page 79, consult the article, "Practical Kinematography".

The theme, "Cheated Blackmail", page 81, is original in suggestion and execution. The personality of the artist, Herbert J. Harper, seems to be reflected in this picture, as it was in several others of a belligerent character published in PHOTO-ERA not very long ago. Happily, his bark is worse than his bite; for Mr. Harper is a professional portrait-photographer of reputation and success—which circumstance speaks for itself. Moreover, he is a very likable fellow.

Data: Made in his studio, New Bedford, Mass.; 400-watt spotlight, not diffused; 5 x 7 Seneca view-camera; 8¼-inch Series II Velostigmat; stop, F/8; Wollensak 6 seconds; Eastman Portrait Film Super Speed; metol-hydro; Vitava Etching Brown K; metol-hydro.

The picture, "A Serious Business", agrees with the title. The little model has adapted herself well to her father's photographic design. The mock gravity has been admirably expressed; but the setting is less happy than in similar pictures by Mr. Ludlum. It is too severe and too insistent to be entirely pleasing; also it does not harmonize with the dainty appearance of the child-model. No data.

"A Wintry Night", page 86, the only out-of-door subject in the series of successful prints in the "Arti-

ficial Light Photographs" competition reproduced in this issue, is a capital bit of technical skill. It is also an exceedingly attractive and well-composed picture, of which the atmospheric effect is an exceptionally admirable feature. The rules of pictorial composition have been met with fine artistic judgment. Witness the snow-covered tree at the right, which is placed in just the right spot. The foreground, with the rut-filled road entering the picture in a bold curve, has been managed with commendable skill.

Data: In Cleveland, U.S.A.; March, 10 p.m.; arc-light; No. 3 Kodak (3¼ x 4¼); R. R. lens; 10 minutes; Eastman roll-film; pyro, tray-development; print, Platino Bromide extra Rapid.

The "Michigan Veteran", page 87, is in an appropriately low key. The seemingly dark bronzed complexion is doubtless correct; but the highlights on the side of the nose and over the eye-brow appear out of place, and suggest a degree of inexperience with this mode of illumination—arc-light—the thorough mastery of which requires exceptional knowledge, skill and experience. Unless the deep, heavy shadow caused by so strong a light is placed against the face or figure of the sitter for a *convincingly artistic purpose*, or deliberately to produce a striking effect without special significance, it would seem well to exclude it. In the present instance, it is greatly disturbing to a restful contemplation of the portrait. The lower part of the portrait is quite obscured, resulting in a sort of technical mystery. See front-cover for February, 1925.

Data: Made in the studio; September; 8 x 10 Century Camera; 12-inch Wollensak Velostigmat, Series II, at F/4.5; Majestic Spot light; 5 seconds; Eastman Portrait Super Speed; pyro-elon (tank); Artura Iris E.

Subjects, like "On Night-Duty", page 89, have been done quite often, and with admirable success. The mere simulation of a lighted match is not sufficient excuse for regarding such an effect as artistic, or satisfactory, or supposing that it can be done in only one way—a uniformly ghastly appearance of the smoker's face. Of course, there is, in common parlance, a trick in doing it, *i.e.*, by having the right sort and quantity of illumination, and holding the illuminant in such a way as to produce a natural and, at the same time, pleasing result. An exceptionally successful effect of this kind, which I was shown in London, last May, had been made with the aid of a wind-match, in three seconds and lens at F/4.5! Let Mr. Creagan try again and, no doubt, he will be able to show his friends something of which he may truly be proud.

Data: March, 1925; 11 a.m.; light—50-watt globe in hands, room darked by window-shades, but a little outside light admitted at bottom of one shade; 5 seconds; Ica camera, 9 x 12 cm.; Heckla lens at F/6.8; Agfa Super Speed Portrait Film; pyro, in tray; enlarged on Eastman Portrait Bromide White Rough Lustre; M. Q.

We are always pleased to publish an illustration from our South American cotemporary, *Foto-Revista*. The present reprint, page 91, represents what the photographer calls "A Romantic Landscape". It is very likely a view on one of the numerous private parks in Argentina, whose owners are men of wealth and taste. Here we have a delightful theme, which the artist has treated with skill in composition. Perhaps, the highlights at each end of the bridge and in the water are a little too strong to suit the taste of our American and trans-Atlantic readers. Unfortunately, no data.

J. D. Hunting, the professional photographer of North Conway, N.H., has a typical view of the White Mountains, on page 92. I, personally, have never seen a photograph of this widely-known and much-

(Continued on page 113)



ON THE GROUNDGLASS

WILFRED A. FRENCH



The Ciné-Kodak Abroad

WHEN the party of several hundred American physicians visited Great Britain, last May, most of its members carried cameras and used them industriously. Four of the party carried Ciné-Kodaks and, while in Liverpool, provided themselves plentifully with negative film. Amateurs who might be acquainted with any of these cinematographers, or live in the same city where one of them has a practice, should get in touch with him and induce him to demonstrate the results of his cinematographic efforts overseas, at the local camera-club.

Dublin's Fated Nelson Pillar

THE tourist who has visited Dublin, the beautiful capital of the Irish Free State—before it was partly wrecked during the sectional fighting in 1922—and has stood at the head of Sackville Street with its line of splendid monuments, must have been deeply impressed. Many a snapshot has been made of this imposing and beautiful street, whose dominating landmark is the lofty column erected to the memory of England's naval hero, Admiral Nelson. It drew my camera's fire in 1889 and, again, in 1925. This last picture shows the wrecked post-office building and a large ruined area farther along, at the right; but the long row of monuments which extends along the middle of the famous avenue remains intact. Lord Nelson still looks down from his lofty pedestal; but how long he will continue to do so, is a question to be settled by the City Commissioners. They desire that the monument be removed, on the ground that its broad base impedes street-traffic, whereas the real reason is said to be the unfriendly feeling towards England, for Nelson was an Englishman, having been born in Norfolk. Yet, strangely enough, the equally familiar equestrian statue of William III, dubbed by the people of Dublin "King Billy", causes no adverse comment, despite the unforgettable historical fact that it is this same William who won the battle of the Boyne!

Fortunately, there is a division of public opinion regarding the removal of the Nelson monument, sentiment born of long association being opposed to political animosity. Hence, it is quite probable that when American camerists who visit Dublin this summer, "fall for" a favorable view of Sackville Street (renamed "O'Connell Street"), the towering Nelson pillar will still be there to greet them.

Misplaced Enthusiasm

"HURRAH for George Washington!" exclaimed the newly-arrived, patriotic American tourist, visiting England for the first time, as he beheld a line of cars of the Great Western Railway bearing, in large letters, the initials, G. W. Quickly he leveled his camera at the pleasing sight and made a snapshot. His enthusiasm soon subsided, however, as a kindly disposed fellow-passenger explained to him the real meaning of the two letters—"Great Western".

A Popular Advertising-Sign

THE observant American tourist in Great Britain cannot but be impressed by the ingenuity and extent of industrial advertising. Of all the innumerable advertising-signs, none seems to exert a greater feeling of welcome and cheer than the huge yellow Kodak carton seen suspended over the shop of the photo-dealer, chemist, news-agent, or even the small-town photographer, who carries a line of Kodak supplies; for never was amateur-photography practised to a greater extent, in nearly every section of England, Scotland and Wales, than at the present time.

When I called at the official Kodak Agency, in Liverpool, last June, the manager, Mr. Hutchinson, allowed me to inspect one of these large Kodak cartons, a duplicate of which was attached over the entrance of his store. It is an enlarged reproduction—not a replica, if you please!—of a regular spool-container, made of tin, painted yellow, and measuring 9 x 9 x 37 inches. An iron rod runs lengthwise through the center of this giant carton, the projecting ends permitting it to be easily attached or suspended over the entrance of the dealer's shop, whence it can be seen at a great distance. Mr. Hutchinson said that it is easily the most familiar advertising-sign in Great Britain—in the cities, the country and at seaside resorts, and that for convenience of adjustment and instantly recognisable significance it can be matched by no other photographic emblem.



Meeting an Old Friend

RETURNING from the London Zoo, one day in May, after having snapshot "Daniel II", and walking along Marylebone Street, I came suddenly upon a large, red building, which bore a familiar look. It was Madame Tussaud's. Remembering that it was destroyed by fire two months previously, and seeing a number of workmen removing some of the rubbish at the farther end of the building, I entered the nearest opening, on the street-floor, hoping to get a souvenir-snapshot of the interior ruins; for I had visited the famous gallery of celebrities in 1889, 1893 and 1909. The vestibule was wet and in semi-darkness. Noticing two workmen, apparently conversing in low tones, I asked if they could tell me if any objects of value had been saved from the fire. They appeared to take no notice of me, but gazed at each other. Looking at them carefully, in the dim light, I discovered, that I had been talking to Count Bismarck and General von Moltke! These wax-figures, together with a few others which I noticed standing not far away, had been rescued intact. Walking a little farther, I found myself in the Chamber of Horrors, which, although still partly flooded as a result of the fire, appeared to be fairly preserved. I was afterwards informed that the moulds of the wax-figures destroyed have been preserved, and that some enterprising firm, probably American, was going to restore the famous museum and open it again to the public.



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



Photographs on Silk or Satin

It is quite a simple matter for anyone who has mastered the ordinary processes of photography, to sensitise silk or satin, and to make his prints on that. At one time, there was quite a choice of ready-sensitised fabrics; but one hears nothing of them today, so that we are driven to do the sensitising ourselves. Other materials than silk or satin can be used, such as linen or cambric, the procedure being the same in each case.

The process must be a daylight printing-out one, as a rapid bromide emulsion is a much more serious affair. Hence, we shall need negatives the size of our prints. It is essential that they should be good ones, fully exposed and fully developed. A poor negative is bound to give a poor result; and the printing-process should be kept for our best.

The printing-process here described is a very old one; in fact, it is essentially one of the earliest photographic printing methods which came into general use, in that case, of course, paper being treated. The operations are of a two-fold nature. In the first, the fabric is impregnated with a solution containing a soluble chloride, and when it has been treated with this and dried, it is made sensitive by the action of silver-nitrate, which, re-acting with the chloride, forms silver-chloride on the material.

Having decided on the fabric it must be thoroughly washed, rinsed and dried, to get rid of any "dressing" it may contain. This might otherwise affect the solutions used; and in any case would mean the introduction of an unknown quantity. This done, all is ready for the first stage—the "salting".

We mix 180 grains of arrowroot with cold water until it forms a thin paste; next add 8 ozs. of water at a temperature of about 190° Fahr.; and keep the solution at this temperature until it clears. The solution should then be allowed to cool. While it is doing so, 75 grains of pure crystallised ammonium chloride; 120 grains of sodium carbonate, and 30 grains of citric acid, are dissolved in 2 ozs. of cold water. When the arrowroot is cool the two solutions may be mixed together.

The fabric which is to be sensitised should be soaked for ten minutes in the solution thus prepared, and then removed, drained well, fastened on a flat board, and placed in a warm room, that it may dry rapidly.

When dry it is ready for sensitising. For this, the following bath must be prepared:

Silver nitrate.....	1 oz.
Citric acid.....	¼ oz.
Distilled water.....	8 ozs.

Naturally as this bath sensitises the fabric, it must be applied where there is no light that will do any harm. Any form of artificial light in ordinary domestic use, in fact any light but that of the electric arc, or daylight, is quite safe. The prepared fabric is soaked in the silver-nitrate bath for five minutes, and then allowed to dry in the dark, or at least out of reach of any daylight.

The fabric is then sensitive to light, and is printed in the same way as printing out paper. It may be fixed with hypo, or first toned with gold chloride, and

then fixed. If the prints are fixed only, they are red in color, and the printing has to be fairly deep. If they are toned, various shades of purple and brown may be obtained.

Care should be taken in the final drying of the fabric. It should be fastened to a board to prevent wrinkles on the surface, which would result if the fabric were hung up to dry; and may finally be finished off by ironing. WRIGHTON, *The Amateur Photographer*.

Rain

THE photographer and the naturalist have one thing in common—they can say "Good-morning" to any kind of weather, and mean it. In a happy combination of both, we have a being who can extract much joy from his surroundings, be it slum or woodland. If the heat of the sun has driven even the athlete to the shade of his tent, this irrepressible person, impervious to heat, is combing the pastures for a rare plant, or clicking his shutter at the sunshine on the stable-door. With the temperature at zero, he will be up in the early hours to catch the hoarfrost on the brake, or the snow on the trees before the sun melts it. If you ask him what is the cream of the season, he will probably have to scratch his head and promise to send you a postcard when he has made his decision.

In a modest way I tried to emulate this blessed mortal one morning. I had often noticed as I passed through a charming copse after a shower, the shine of rain on the branches, and the crystal drops sparkling on the under side of every twig. I donned a mackintosh, and with camera and tripod set out to photograph rain. There was abundance of the subject. Even a turned-up collar could not shut it out; but on my reaching the copse I soon forgot about the excess, and became absorbed in finding the objects upon which the rain showed most strikingly, and in arranging for them a suitable background.

I had to keep a wary eye on the lens, and wipe it carefully immediately before each exposure; but the hinged hood of the reflex protected it fairly well from the rain. The meter gave the exposure as one second at F/8, and this I doubled, waiting for a lull in the breeze before releasing the shutter.

I had packed up my tripod and camera and was hurrying off, blue with cold and very wet, when, on crossing a footbridge over a stream, I saw another rain-subject. This was the rings in the water caused by the impact of the raindrops. I snapped this, too, resting the camera on the handrail, and giving 1/25 second at F/4.5. It gave me a picture with a certain amount of interest in the design—something different from "the usual thing".

Since then all sorts of ideas for rain-pictures have crossed my mind, but most of them are intimately connected with foliage, and a temperature a little further removed from zero.

H. W. HAYWOOD in *The Amateur Photographer*.

[We believe that the suggestion made in this little article will serve to stimulate our readers to make pictures in which the rain helps to make the subject different. EDITOR.]



THE AMATEUR KINEMATOGRAPHER

HERBERT C. MCKAY



The Amateur Kinematographer

I HAVE just received a very encouraging letter from Mr. H. Syril Dusenbery of San Francisco. Mr. Dusenbery has gained quite a reputation as an enthusiastic amateur in still-work and he is now devoting the same whole-hearted spirit toward bettering the cause of the sixteen-millimeter gauge motion-picture camera. It is a pleasure, indeed, to receive communications from an amateur who is serious in his work.

I have also received a letter from the manager of the Service Department of the Eastman Kodak Company. In this letter he comments upon the thousands of feet of sixteen-millimeter film which are ruined by the amateur because of rapid panoraming. We are all familiar with this fault; but I had no reason to think that it is as widespread as it really is.

The manufacturers of the amateur motion cameras did not devise the motor-drive in order that the amateur might be free of the laws which govern motion-picture exposure; but rather that he might be assured of uniform cranking and that he might not be under the necessity of carrying a heavy tripod. Let us first consider some of the optical laws which govern the case.

Any object projected upon the screen moves, not in relation to its original movement, but in relation to its movement with regard to the camera. Thus, if we move the camera while exposing upon a stationary object, that object will move upon the screen. Our first discovery, then, is that any movement of the camera will cause a corresponding movement of every object upon the screen. This, of course, includes the landscape or other setting and all of its component parts.

Next, let us consider the motion of everyday life and its effect upon us. If any object, or group of objects move while in our vicinity, we see this movement. The change in outline due to the change of the position of the object would be some clue to its motion; but we are primarily made aware of the motion by comparing the moving objects with the stationary objects of the surrounding landscape. If some violent upheaval of Nature could start the entire landscape whirling past us, we should have a confused and uncertain feeling, not unmixed with nausea.

This leads us directly to the question of the panoram-movement of the motion camera. When we follow a rapidly-moving object with the camera, that object is rendered relatively motionless while the setting is in rapid motion, the background moving more rapidly, the middle distance at a moderate speed, and the foreground with relatively low speed. So, if the camera could be trained directly upon our object, we should keep it in the center of the screen while the landscape would sweep past in dizzying fashion. This is quite enough to make some spectators physically ill, and to strain the eyes of all; but unfortunately this is not all of the problem.

In such hurried panoraming, the kinematographer will swing the camera with more or less of a jerk. If you don't believe it, try to keep any rapidly-moving object squarely in the center of the field of a pair of binoculars. There will be some up-and-down movement, some overshooting and some lagging behind.

As a result, the object will dance about over the screen and all objects in the background will have this same motion imparted to them in addition to the unnatural panoramic motion. The effect upon the eyes is quite similar to that obtained by trying to use a pair of binoculars while riding in a light automobile over a rough road.

I wonder if you have ever wondered why the professionals use such heavy and beautifully built tripods? Do you understand why a good cameraman will not balk at paying two hundred and fifty dollars for his tripod alone? It is because he may rest assured that his pictures will be rock steady upon the screen. This steadiness is the first essential of a successful motion-picture. Without it, the picture is but an illuminated screen, the illusion of re-creation is lost.

You can see where this leads us. I do not insist that the crank is necessary; but if you intend to obtain the best possible in motion-pictures, you will use a tripod or other steady and firm support for the camera. There is seldom any need of panoraming. Some subjects demand it, but not many. Ninety-five per cent. of your shots should be made without moving the camera from the beginning to the end of a scene. I understand that the temptation toward continual panoraming is strong—but it means ruined film. Don't do it! If your subject leaves the field, well and good. Stop the camera, swing to a new angle and start up again; far better to have a half dozen steady shots of five seconds duration than to have one of a half minute so blurred and jumpy that no one can take pleasure in looking at it. Unless the subject absolutely prohibits it, always use a tripod or some substitute for it. After giving the tripod a fair trial, you will never abandon it. Just remember that in still work, while the picnicker will make snapshots, the pictorial worker usually sets his miniature camera upon a tripod and uses the utmost care in his work. The results tell the tale; but in motion work the tripod is more essential than it ever is in still work.

At times, it is almost impossible to avoid the panoram. Hence, professional tripods are provided with a panoram-movement. If you find that it is absolutely necessary to make a panorama, loosen the tripod-screw, and while cranking, move the camera upon the tripod-top *slowly*. The tripod-top will maintain the proper horizontal plane, and a slow movement will result in a true panorama, one in which detail may be seen. Remember that a blurred, rushing mass is not a panorama.

Physical law cannot be changed. The waste of film due to this cause alone is great enough to cause amazement in the mind of an official who habitually thinks of film in terms of millions of feet. Suppose that you make a resolve that no more of your film will be lost due to this fault. Dig out the tripod and use it. Your motor will give you a uniform crank-speed; but it cannot keep the picture from jumping if you persist in trying to keep your camera in your hands while it is running.

Some of you may object to my point of view. If so, I shall welcome a letter from every one of you who does not agree. And letters from those who have learned this lesson from experience, will be just as

welcome. In fact, I want to hear from all of you. Even if you have just purchased a camera yesterday and want to know the very first steps to take, I shall be very glad to hear from you and to serve you to the best of my ability.

The Victor Ciné Sales Corporation of Davenport, Iowa, announce the introduction of motor-driven camera and projector. We have not yet had the pleasure to examine this model, but hope to report fully next month.

Pathé Inc., announce the long-expected Baby Pathé. The complete outfit sells for \$95.50. The film is $9\frac{1}{2}$ millimeters gauge, with a single row of perforations between frames. Magazines filled with seventy-five equivalent feet sell for \$1.75. Reductions from theatrical productions sell at the same price.

The Birth of a "Boom"

PEOPLE who are behind the scenes in the trade had told me, from time to time, that there was a "boom" coming in amateur cinematography, but I confess I had noticed no particular signs of it until I went to Switzerland last winter, says Mr. Ward Muir in *The Amateur Photographer*. The four or five months I spent at Davos convinced me, however, that the motion-picture is really arriving among amateur photographers.

These Swiss resorts are full of ordinary cameras, of course, and in the more cosmopolitan places, like Davos, there is a fair amount of serious photography done. One sees, for instance, numbers of stereoscopic cameras. Non-English visitors, especially the Germans, appear to have a passion for stereoscopic photography: whereas in the purely English resorts it is seldom met with. And though I am not a stereoscopist myself, I recognise that the man who will be at the trouble to take, develop and print stereoscopic photographs—and especially some of the lovely transparencies I was shown—is what I should call "keen".

And so it was, I seemed to notice, with the individuals who were going about with motion-picture apparatus. They were the "keen" folk of photography, on the whole, though I will not assert that many of them belonged to the world of the pictorialists.

There may have been English amateur cinematographers at Davos, but, if so, I did not meet them. Those I met were Swiss, German and South American, the Swiss and German being especially eager experimenters. There were several motion-picture cameras in the hotel in which I was staying, and hardly a day passed but some scenes were staged—vivacious groups and the like—on the terrace in the sunshine, or at the snow-slopes where the beginners practised skiing. This form of portraiture is excellent fun. If involving more trouble and a trifle more expense than "stills", it gives a great deal of pleasure to the parties concerned.

Indeed, it has, at moments, a more poignant interest. It happened that a skier and his guide were killed in an avalanche in the Davos district last March. Next evening we saw them both alive again—on the screen—arriving on skis at the Parsenn Club Hut in the mountains. The film was made the very day before they perished. One of the cinematographers from our hotel had been up at the Hut, and by chance had used this pair to enliven what would otherwise have been an empty landscape of snow. His film being a standard-size one, it could be run through the projector of the "movie" show in the hotel.

For it must be understood that most of the big hotels

now have a kinema show one evening a week for the entertainment of their guests. Thus we assemble to enjoy Charlie Chaplin, or some such star, as a change from the continual fox-trotting.

Naturally, when the operator arrives, the amateurs hand him their latest results and ask him to run them through—an interlude arousing, it must be said, more excitement among the audience than, sometimes, the much-advertised drama does. The members of the audience recognise themselves or each other on the screen, and there are roars of laughter evoked by even the technically least competent pictures—because of this recognisability.

Especially were unrehearsed and unintentional episodes applauded. A nice group-dialogue or scene of after-luncheon coffee-drinking on the hotel veranda would be suddenly entered upon by a waiter or concierge unconscious of the camera's presence, and the intruder, becoming aware that something was wrong, would back out apologetically, or turn tail and flee.

Those were the films which went well with the hotel-audience—who thus, I venture to opine, showed their good taste, at least in the humorous: for it is the real which makes an effective amateur motion-picture, not the artificial.

The audience were usually bored with pure scenery, however well chosen. A young German, an excellent photographer, was fond of making ski-trips into the remote Alpine fastnesses and brought back many films which were mere views and had no quality of motion in them. The camera was revolved on its stand, showing a panorama of range on range of peaks. But "stills" in the form of plain lantern-slides would have done the thing as well, or better. Even when the view included a moving feature such as a tumbling torrent, these scenic items attracted small enthusiasm. When skiers were the subject, and the scenery only the background, the audience awakened to attention once more.

Naturally the skating and curling rinks made first-rate subjects too. The toboggan-run was less practicable, for the toboggans and bobsleighs went past too quickly; and the momentary thing, in cinematography, occurring and gone again like a flash, lends itself to the medium less well than the thing of relatively slow entrance and exit.

However, there is no doubt that a Swiss winter-resort is an ideal hunting-ground for the amateur. The local dealers were doing a brisk trade in film.

Most of the amateurs had their films developed for them: the dealers aforesaid did not, so far as I know, attempt this themselves; they acted as agents for a firm in Zurich. The films treated by this firm were often capital, those which some of the amateurs developed for themselves were often bad.

I saw privately many which were not displayed—because the darkroom of the hotel was invaded by the cinematographers, who spent hours and hours in its locked interior, sometimes to my sorrow when I wanted to do a little developing of plates on my own account.

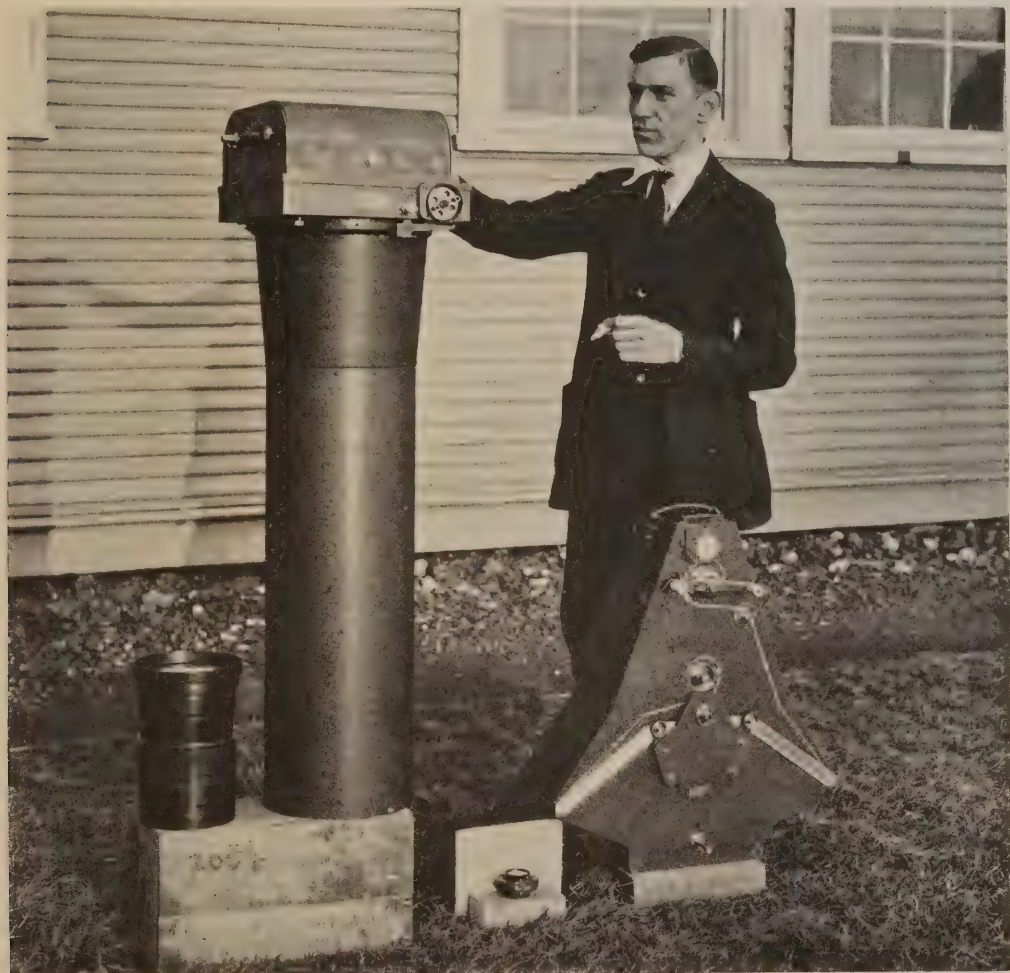
But it soon became evident that in cinematography, as in ordinary photography, there are people who make endless mistakes—aim badly, focus badly (usually when no change of focus was necessary at all), and have no eye for subjects; while there are others who, from the first or second attempt, get the idea and produce entertaining or even beautiful pictures. It is a matter of temperament. Cinematography requires care, and there are some people who, mysteriously, *cannot* be careful.

In short, it will be the old-fashioned photographer who will be the first to succeed in this newest fashion of photography.



THE MILITARY PHOTOGRAPHER

CAPTAIN A. H. BEARDSLEY, SIGNAL-RES.



Official Photograph, U. S. Army Air Service

Courtesy National Geographic Magazine

HIGH-ALTITUDE CAMERA AND TRI-LENS CAMERA

On the Way to Learn

WHILE these lines are passing through the printer's hands and through the presses, as this issue is being printed, I shall be on my way to Chanute Field, Rantoul, Illinois. There I hope to learn of many things which have to do with the very latest developments of motion-picture and still-photography as applied to mapping, engineering, exploration and military requirements. There is situated the well-known U.S. Air Service Technical School, with its special Photographic Department to train officers and enlisted men of all branches of the service for photographic duty in the air and on the ground.

It is my hope that I may have the pleasure to meet

Captain A. W. Stevens, U.S. Air Service, whose remarkable pictures we have been publishing from time to time. He has returned recently from the exploration of the Amazon River in South America. Moreover, I hope to meet many other officers, and civilians, too, who are doing things in applied photography. I may not obtain much information of interest to the pictorialists; but I do believe that my fifteen days of active military duty will open my eyes to the splendid progress photography is making to help the onward march of science, engineering, exploration and civilization itself. This is one of the many times when I realise how very little I really know about photography. However, I'm on my way to learn.



LONDON LETTER

CARINE AND WILL CADBY



MR. CURTIS MOFFAT has an exhibition of photographs at the Bond Street Galleries (14 Clifford Street). He is an American from New York, who, beginning as a painter, has, like many others, taken up photography as a profession. He began work in Paris but has now settled in London, and in partnership with Miss Olivia Wyndham has opened a studio at 4 Fitzroy Square, Bloomsbury. Most of the work shown consists of big head-studies, apparently done in bromide; and as Miss Iris Tree is Mr. Moffat's wife it follows that interesting personalities predominate among his sitters, among which may be mentioned Miss Gladys Cooper, one of our most beautiful actresses, Miss Viola and Miss Iris Tree, Miss Nancy Cunard, Lady Diana Cooper, Mr. and Mrs. Augustus John and the Rancee of Sarawak.

Although the pictures are all signed by Mr. Moffat, we understand they will in future bear the names of both partners, and the secretary pointed out to us, in going around the show, some most successful children's head-studies that were made by Miss Olivia Wyndham. These artists have a very decided appreciation not only of the temperaments of their sitters but of the possibilities and limitations of the camera, and promise a new departure in sound artistic portraiture which is most welcome. There is no straining of the medium or the model to gain an effect, it always seems to arrive naturally and with distinction, and some of the poses are particularly happy. There are four frames hung on one wall called, "Abstract Compositions", that we should name "Eccentricities", being involved renderings of apparently near-up still-life objects, quite Cubist in design; but from our point of view hardly worth the trouble they must have been to make.

The Collective Advertising scheme has done a good deal to wake up professional photographers. They have been given all kinds of advice and rules for their guidance, one being to make their windows more attractive and interesting. This seems to have been taken to heart and we have seen some quite striking displays. One was a window of weddings—cardboard bells hung along the top and happy bridal pairs, bebies of bridesmaids and small and big wedding-groups smiled at us from every corner of the window. This was in May which, over here, is considered the month of marriages. Another photographer had specialised in children. The passerby's attention was focused on an enormous portrait of a baby; in the very middle, and around this center were grouped photographs of children in their various stages of development, finishing at the outer edges with big school-girls and boys, and at the extreme sides were hung college-groups.

This matter of window-dressing has become all-important in every trade, and when in town yesterday we were amused to see one of our biggest London stores caught napping. Their chief window had a background of light green against which was set a giant sheaf of apple blossoms. But in this exceptionally hot and sudden season, Nature has moved at an abnormally rapid rate, and with a continually blazing sun, fruit blossoms are very much a thing of the past, for mid-summer has arrived.

The Rev. A. H. Blake, who is famous for his photographs of London by night and the school he founded for specialising in this direction, has been doing useful work for our overseas visitors whom we have with us now in crowds. No one knows London more intimately than Mr. Blake, its pictorial possibilities for the camera, and its historical associations. He has always been keen to act as guide to those who shared his interests and enthusiasms, and now he has found his exact niche in the scheme of things. A series of rambles has been organised by the Overseas League under Mr. Blake's direction, and visitors will be taken to such places as Lambeth Palace, the Mansion House, the Tower of London, Dr. Johnson's home etc., in London, and to many old and interesting places outside the metropolis, whose owners are known to Mr. Blake and who are willing to let him show their houses, so that the outings of the Overseas League are not likely to be of the old-fashioned and stereotyped character.

The Kodak Company have had one of their popular brain-waves, and just at the right moment, too, before the holiday-season begins. Kodak users are to have a badge which may serve as an introduction to other Kodak users. As they say "The wearing of it will unlock many doors to you", and we can well believe it; for we have seen many a romance started through the agency of the little black box. "You must give me your address" says he, "and I'll send you the snapshots". "Oh, thank you", says she, "and I will post you a copy of the group", and as every experienced person in such matters knows, when once a correspondence is started, the rest is easy.

But seriously, the badge is a sound idea, and will serve a most useful purpose. We British are a tiresomely reserved people, often eager to be friendly, but held back by a stupid shyness and fear of rebuffs. Now, if we wear the magic little button we cannot fail to feel a sort of freemasonry towards others who show the same "insignia", for it will be a proof of at least one big interest in common, focused and consolidated in our joint membership of what no doubt will become a very large and influential community. We would go further, and suggest to Messrs. Kodak that they in some way guarantee the respectability—the term to be used in its broadest sense—of members of the fellowship, so that the sight of the little badge would not only suggest community of interest, but a feeling of security and good fellowship. But we are here going beyond our sphere, and, no doubt, so enterprising a firm will discover a means to obtain this desirable result.

Mr. Reginald Haines has just given his presidential address to the Professional Photographers Association. Besides being witty and entertaining, it contains so much that is of value that it should be broadcast to all photographers. His aim is to uplift the profession and, of course, in doing this he is surely advancing the truest interests of the Association and the individual members. He finds much in King Solomon's sayings that is applicable to present-day photographers, and quotes largely from the king who lived nearly three thousand years ago to prove his assertions. But the thought underlying the whole address is aptly sum-

marised in his last words: "He profits most who serves best". It is a text from which endless sermons could be preached. Intelligent self-interest in our complex modern world is certainly best served by working for and studying the interests of others. The narrow minded and the short sighted may call it a hard saying; but it is in the long run nevertheless true.

Our Illustrations

(Continued from page 106)

visited region that does full justice to its scenic beauty and loveliness, and I enjoy an intimate acquaintance with every section of it which extends over a period of forty years, and have seen the views of every photographer of note, including those of the famous Kilburn Brothers of Littleton, N.H. True, the White Mountains, one of the most popular summer-resorts on the American continent, do not rise to the enormous height, nor have they the spectacular appearance, of the Rocky Mountains. Nevertheless, a closer view of the region, whose larger peaks attain an average elevation of five thousand feet, will reveal an attractiveness and individual charm that visitors declare exist nowhere else. Mr. Hunting's landscape is comprehensive and filled with pictorial interest, but the various parts do not willingly lend themselves to a composition of salon-quality. Those who visit and love the White Mountains, cannot but admire this view from Intervale.

Data: Intervale, N.H.; July, 2 p.m.; good light; Eastman 8 x 10 camera; 12-inch Ross lens; K-2 filter; stop F/22; 2 seconds exposure; Orthonon plate; pyrosoda; Azo E. 2.



The Choice of Backgrounds

BACKGROUNDS are of several types. Some form an integral part of the picture, adding to its interest and essential to its completeness. Of these the background to a landscape is typical; while another familiar example is a race picture in which a view of the course intensifies interest in the runners. Another type is entirely unobtrusive—just an even shade of black, white, or neutral tint. This kind is what is generally used in portraiture when the subject is intended to speak for itself, with as little as possible in the way of interference by externals.

Work with such neutral backgrounds is not as simple as might be supposed. In a studio, a canvas background of uniform shade is generally used. One midway between white and black is safest, as then it does not unduly emphasise either the highlights or the deep shadows; but if we wish to use such emphasis, instead of a midway shade, one that is decidedly darker or lighter will be best. Absolute white or black rather tends to overwhelm the subject; but in skilled hands, for special purposes, each has been and may be used; but safety lies in the happy medium. Of course, we can make either a black or a white background come out as a gray tone in the print, by taking care to have the black background strongly lit, or the white one in shadow. Checkered or otherwise broken designs are rarely good.

It is in outdoor portraiture that the background is likely to cause most trouble. A figure is seen against a brick-wall, or window, or a mass of sunlit foliage. However carefully posed and lighted, the result fails because every detail in the background comes out with striking vividness. Some workers endeavor to

remedy this by blocking out the background on the negative; but the remedy is almost always worse than the disease.

It only needs a little search to find near at hand some plain wall, or at least one in which the bricks are not staring and assertive, or some quiet unobtrusive bank of foliage in shadow. If neither is in itself sufficient, then the subject should be brought as far as possible in front of the background; and by careful focusing and using the full aperture of the lens, the background may be softened down or thrown out of focus. Such things as fences, wire-netting, trellis, gleaming windows, and details picked out in white paint, are to be avoided.

Our subject should not be posed half against the ground and half against the sky. If a hedge is to form the background, it must be thick; or the light shining through will produce most irritating white spots in the photograph. Out of doors, as a rule, dark masses form the best backgrounds, but a dark mass with white patches is worse than a light one. A plain sky often makes a very effective background.

The use of a background having some definite connection with the subject is now more general, and is all to the good. The conservatory, rustic bridge, or flight of steps, which were made to do duty for every sitter, have given place to something more germane to whoever we are photographing. A golfer is shown on the links, a painter in his studio, and so on. But in all such cases we must take care that the background attracts no more attention than may serve to lead the eye to the central object. If it is more than a suggestion, it may introduce a competing element and spoil the picture. A photograph of a boxing-match in front of a large crowd is helped if the background just indicates the presence of the spectators; but if individual faces in the crowd are recognisable, the background ceases to be a help and becomes a hindrance and a counter-attraction.

Where, as in pure landscape, the background forms an essential part of the picture, we must take care to see that it is in correct aerial perspective. It must remain a background; and not by its tone or contrasts come forward, so as to lose all suggestion of its true position.

HERBERT MACE in *The Amateur Photographer*.

The Slanters' Class

A READER, in sympathy with my efforts to educate the amateurs who, by reason of their careless use of the camera, or by their inability to see correctly, send out prints in which the normally level waterline is oblique or, in common parlance, "runs down hill", makes a suggestion worthy of consideration. He thinks that it might be well to classify such "slipshod" workers, by setting apart in one of my cabinets a space to be allotted to prints that have this serious defect, arranging them alphabetically according to their authors—a sort of chamber of horrors. Well; that would not be a bad idea, in the nature of a record. Of course, I should not think of utilising such a collection of technically defective prints as a feature of PHOTO-ERA MAGAZINE, but to keep it as a curiosity, to show some visitor how easy it is for camerists to err, and that even workers of note are not immune. I'll wait a while and see what happens.

W. A. F.

One fault will not justify another.—*Old English Proverb.*

Easy to look at—difficult to imitate.—*Chinese Proverb.*



HERE, THERE AND EVERYWHERE

To ensure publication, announcements and reports should be sent in not later than the 5th of the preceding month.



A. C. C. of A. Making Survey of Camera Clubs

WITH the recent Bulletin of the Associated Camera Clubs of America there was sent a census-card, its purpose being to gather data from all clubs or societies on record as to their membership, date of organisation and equipment. These cards were sent particularly to members of the association; but other clubs of which the A. C. C. of A. had a record were also included. After the cards are all in, there will be some heretofore unknown information available. From the census the Associated Camera Clubs of America will learn the total number of camera clubs or societies in America, the total membership included in all clubs, the club of oldest origin, the largest club in respect to membership and other data of interest. So far as is known this is the first time such a census has been attempted. Although an effort was made to reach all clubs, it is possible that a few might have been overlooked. If such is the case, and their secretaries will write the Associated Camera Clubs of America at 27 Franklin Street, Newark, N.J., a census-card will be sent them.

The last Bulletin to the Association members contained a ticket of candidates for election to the various offices to take effect October first. Those presented for consideration and vote were for president, Louis F. Bucher, of the Newark Camera Club; vice-president, E. H. Brown, Dallas Camera Club; secretary, W. C. Mackintosh, California Camera Club; treasurer, Harry W. Greene, Camera Club of Cincinnati. For the Board of Directors the following names were presented: Julius Cindrich, Southern California Camera Club; H. G. Cleveland, Cleveland Photographic Society; George W. Harting, Pictorial Photographers of America; John H. Kiem, Orange Camera Club; E. Roy Monroe, Portland, Me. Camera Club; and Paul T. Tarnoski, of the Chicago Camera Club. Mr. Julius Cindrich, 2654 Merced Street, Los Angeles, California, will again be Director of the Associated Print Interchange.

The Associated Camera Clubs of America was organized in 1919 by Louis F. Bucher, of the Newark Camera Club, and now has a membership of about thirty of the camera clubs or societies in America. A year or two ago the association published a booklet on "The Camera Club, Its Organisation and Management" which has had wide distribution, copies having been requested from camera-workers in all parts of the world. This booklet is still in print and will be sent to those really interested upon receipt of four cents in stamps. Address "Publicity" A. C. C. of A., 27 Franklin Street, Newark, N.J.

Photographing Noise

ACCORDING to a report in the British press, photography is to be called in to ensure the comfort of passengers flying from England to the Continent by helping to eliminate the roar of the machines.

Sound-photographs recording the noises in the cabins of Imperial Airways cross-Channel passenger-airplanes while in actual flight will be obtained by Professor A. M. Low with a view to locating the actual source of the various sounds.

The big Napier engines used on many of the air expresses have already been silenced to a remarkable degree, but it is found that the propeller revolving at high speed and the vibration of the stay-wires produce distinct noises, and it is with a view to tracing and eliminating these that Professor Low is to carry out his experiments.

It is hoped to produce a passenger air-express in which the noise inside the cabin is actually less than on the latest express-train.

Camera Club of Cincinnati

THE Camera Club of Cincinnati elected the following officers at a directors' meeting held on Monday, June 15: Dan Morgenthauer, president; Robert P. Nute, vice-president; C. A. Weddigen, secretary; Harry W. Greene, treasurer; and Harry Olhenroth as chairman of the program-committee from whom we may expect some good meetings in the future.

C. A. WEDDIGEN, *Secretary*.

Malta Salon Honors Joseph Petrocelli

OWING to delay in the mails, we did not learn until recently the Malta Salon of Photography, held at Valetta, the Island of Malta, October 18 to 26, 1924, bestowed upon the exhibitors of the best pictures shown at the exhibition a diploma (the highest honor), which signifies that these pictures were retained by the Salon for the Valetta Museum, Photographic Art Collection. One of the few American exhibitors to receive this honor was Joseph Petrocelli, the well-known pictorialist, worker in bromoil and resinotipia, of New York City.

Photographic Advertising in England

WE have recently had the opportunity to study a full page advertisement of the Amalgamated Photographic Manufacturers, Ltd., Soho Square, London, W. 1, which appeared in the *Daily Mail* of London, England. We were impressed by its appeal and excellent lay-out. It conveyed photographic information, featured one camera model, displayed others, explained their new roll-film and included a picture to prove the point of its quality. Altogether it was the sort of publicity which is dignified, interesting and practical. It ought to bring splendid results.

Side-trips in England

THE tourist who motors about in England is enabled to penetrate into places denied to him who travels by railway. Yet the latter, whose itinerary is confined to the cathedral-cities, can make easy and cheap excursions into the country and visit little villages and out-of-the-way places, which are filled with unique charm and beauty, by making use of the numerous chais-à-bancs (sight-seeing motor buses) which start from convenient centers in the large cities, and take

the tourist into outlying places of scenic and historic interest, these round-trips consuming from two to ten hours according to the distance reached, and form pleasant and profitable diversions from the regular visits to cathedrals and museums. Thus, from the famous seaside resort, Weston-Super-Mare, in Somerset, I took a char-à-banc to the famous and imposing Cheddar Gorge and the nearby wonderful Gough Cave. I was well repaid. At Bath, after having viewed the Abbey and the Roman Baths, I followed the advice of the local master-photographer, Herbert Lambert, on whom I called, and made the delightful char-à-banc trip to Castle Combe and return, and, at Gloucester, in a like manner, an excursion to the beautiful Cotswold Hills. These are but a few motor-trips I made from the numerous large cities I visited. Before my arrival at Liverpool, June 12, when I depart for Boston, on the Cunard S.S. *Carmania*, I shall visit Chester, and make it my headquarters for several char-à-banc excursions into delightful North Wales. In this connection I must not forget to mention my memorable visit to the home of the Cadbys, which is delightfully situated in the heart of the scenically fascinating county of Kent. This excursion was made from London by railway, on account of its relatively large distance.

W. A. F.

HEREFORD, June 6.

Photography is Coming into its Own

THE recent meeting in Paris, France, of the International Photographic Association to celebrate one hundred years of photography and to honor Niepce, gave rise to nearly a full column-length editorial in the *Boston Herald* of June 29, 1925. The title of it was "100 Years of Photography" and it gave a splendid résumé of photography from its beginning to the present day. However, the interesting fact is that a high-class metropolitan newspaper thinks enough of photography to devote so much valuable editorial space to the subject. Indeed, photography is coming into its own.

New Address of William C. Cullen

FOR forty-three years the photo-supply store of William C. Cullen, situated at 61 William Street, New York City, has been well known to bankers, brokers and business men of lower New York. Because of the reliability and excellence of the service rendered, we are very sure that our New York readers will continue to patronise this photographic establishment at its new address, 12 Maiden Lane, near Broadway.

Film-Standardiser to Help Make Better Pictures

SELECTION of movie-films, camera-plates, and printing-papers suitable to the work in hand is to be aided by an instrument for the testing and standardising of light-sensitive emulsions developed by Raymond Davis, Chief of the Photographic Laboratory of the Bureau of Standards, of the Commerce Department, and known as a sensitometer.

The emulsions with which plates, films, and papers are coated vary considerably in speed and contrast, and in sensitiveness to light of different colors. All of these properties affect the use to which the product can be put. A fast plate or film is needed to record swiftly-moving objects, a contrasty plate for use on cloudy days, a soft plate in brilliant sunshine. Brilliantly colored objects are rendered best by a plate and color-filter combination giving the same color-sensitiveness as the eye, but in photographing distant mountains or making airplane-maps a greater sensitiveness to red is needed.

The Davis sensitometer will permit the exact measurement of all these factors, and the setting up of standards for them. It is, in effect, an instrument to give a precisely known set of exposures to a strip of the emulsion, and to make these exposures with a light of known intensity and color. The darkness of the exposed strips is measured by means of a photometer to obtain values to plot curves of the densities. From these curves the speed and other characteristics are obtained.

A large disc having a multiple of different apertures cut in it forms the shutter which gives the graduated exposure. The opening is so shaped as to give a series of exposures varying by a constant ratio and forming on the plate a row of small rectangles, each a little darker than the one preceding it. The disc must be driven at constant speed, and for this purpose an electric motor is provided, having ingenious devices to make it run at constant speed and to keep it in step with a clock. There is an electric shutter, also, which is set to remain open during one revolution of the disc, so that a short continuous exposure can be given, although the disc has been running for some time and has reached constant speed-conditions.

An electric light of carefully measured candle power is used, together with a special light-filter so that the color of light obtained is a good approximation of daylight throughout the spectral range. Other color-screens can be placed in front of it to absorb any desired range of wave-lengths, and give light of any desired color.

George A. McLaughlin

MR. GEORGE A. McLAUGHLIN, manager of the Robey-French Company, Boston, U.S.A., died June 26, 1925, after an illness of several months. He had been in the employ of the above-named firm as traveling salesman for New England since 1902, and, on account of his intimate knowledge of the business, his long experience with the trade and other important qualifications, he was made manager of the well-known house in 1922. He was born in Providence, R.I., where he lived until two years ago, when he moved to Jamaica Plain. Mr. McLaughlin possessed the rare power to make friends, and to gain and hold customers for his firm. He was a man of genial personality and will be greatly missed by a host of friends. He is survived by a widow and two sons.

Clarence H. White

JUST as we go to press a letter from G. W. Harting, President of the Pictorial Photographers of America, calls our attention to the death of Clarence H. White in Mexico City while there with a class of students. Death came suddenly through heart-failure. He was buried in Newark, Ohio. Owing to the absence of members of his family from New York City, Mr. Harting was unable to supply details. Clarence H. White was the first president of the Pictorial Photographers of America and served for five years. He leaves a wife and three grown sons. We hope to have more complete information for our next issue. We extend our deep sympathy to relatives and friends.

Screens and Color-correction

It is unfortunate that there is no convenient "port-manteau word" to express the acceptable rendering of color into monochrome, says a writer in *The British Journal*. We have, it is true, such terms as orthochromatic and panchromatic but these can only be correctly applied to reproduction in color. The former, while it denotes correct color-rendering, does not express any limitations and should, therefore, cover panchromatics as well, without reference to the absence of color in the result. It is perhaps quibbling to point this out, but the need for some more accurate method of nomenclature exists, and it still remains for some enterprising platemaker to coin and register the new word.

The initial difficulty which is encountered when an attempt is made to make a photograph of a subject with decided contrasts of color is the impossibility of formulating any rule as to the depth of tint to be assigned to any particular color. This is left to the taste of the artist whether he use the brush or the camera. It is easy to give a fairly satisfactory transcript in monochrome of a mass of foliage in various shades of green but when the brown tree beloved by the artists of the last century or a bright red roof comes into the composition the question arises as to whether these should be represented as being lighter or darker than the green which is in juxtaposition.

This being the case it is manifestly of the greatest importance that the compensating-screen or light-filter should be suited to the work that has to be done and it is in this direction that many workers go astray. The prevalent mistake is the selection of too dark a filter, with the result that blues are rendered as black and reds as nearly white. In this case, such a subject as a group of fruit, comprising oranges, bananas, red apples and peaches comes out as if the fruit were modeled in pale yellow plaster. There is no relief due to the colors but only to the light and shade. This is manifestly wrong and as bad as rendering a red coat as nearly white or a piece of old mahogany as if it were satinwood.

Outdoors the same error is found. Blue skies become black and yellowish green trees, white, and every trace of atmosphere is destroyed. Apart from the question of allocating a monochrome-value to each color is the question of white light reflected from the surface of most objects. If we copy a specially prepared colored test-chart or photograph the actual spectrum we may get excellent results with a given filter, but in nature we do not encounter these brilliantly saturated colors and the same filter is likely to give over-correction. The wet-collodion process was notoriously color-blind, yet the Bedfords, Payne Jennings, and many other workers obtained excellent landscape-negatives by the use of this surface reflection only.

The photographer whose aim is to obtain an artistic, or, perhaps more correctly speaking, a pleasing representation of his subject will do well to experiment with various depths of color in filters until he obtains a result which is satisfactory to his eye. This was the method adopted by the late Arthur Burchett, a skilled painter who did not claim to be a scientist, but whose photographs were remarkable for their perfect rendering of atmospheric effects. The filters used in aerial photography during the war were specially devised to cut out all haze, but this is not desirable in ordinary landscape-work, in which all that is necessary is to render the atmospheric haze at its true visual value. There are, of course, exceptions to this general rule, notably in telephotography when it is desired to eliminate haze almost entirely so as to give an impression of proximity to the subject.

Commercial work forms a category by itself, and it is permissible to use extreme grades of filters either for contrast or detail, as for instance the employment of a red filter which will render the grain of old mahogany to a degree far in excess of that perceptible with ordinary vision. If, however, the subject happened to be a chair upholstered in green material, the green would be rendered as black. To avoid this two filters, each of which will transmit different colors, are sometimes used on the same exposure, but this can only be done when the optical mounting of the colored gelatine is of excellent quality or the probability is that the two exposures will yield images of slightly different dimensions.

A very important point, not always properly appreciated, is the giving of correct exposure when using filters, especially when they have not been made for use with the particular brand of plate employed. To get true color-values the factor of the filter must be found by trial with the light by which the negatives are to be taken. In commercial work it has been found that a filter with a factor of six for half-watt lamps has had one of forty with the enclosed arc. Similarly in landscape-work the same filter will have a lower factor if used in the evening near sunset than it would at 10 A.M. in a clear white light. Before ortho plates and filters were known, one of the old-time workers obtained excellent flower-studies by waiting till half an hour before sunset to make his exposures.

It may be pointed out that it is not a costly matter to experiment with filters, for first rate results may be obtained by putting a disc of unmounted gelatine inside the lens-tube. Yellow in four depths and trichrome in red, blue and green can be obtained for a few cents the square inch. When the depth which gives the desired rendering is found, a properly mounted filter may be fitted to the lens. If one of sufficient size for the largest lens in use is obtained it may be adapted to smaller tubes by means of cork rings.



Diffusion

DIFFUSION or softness of definition is one of those qualities which are very valuable at times, but which are open to abuse or misuse, says *The Amateur Photographer*. It may be taken for granted that mere diffusion never yet made a picture of something which was not a picture without it, and that many an otherwise excellent photograph has been spoiled by the application to it of some method of blurring, for which there was no need or justification. On the other hand, a good photograph can often be improved by being a little less pin-sharp all over, sometimes by a general softening and sometimes by a local one. This last can only be satisfactorily obtained at the time the negative is made, by means of what is called differential focusing. It must be used very cautiously, and, therefore, generally calls for a focusing-screen on which the exact effect that will be obtained can be seen. Points of light which are very much out of focus are rendered as round blobs, which, instead of making the points less conspicuous, may actually make them more so. It is not practicable to obtain a general uniform softness by throwing the image out of focus, as this will almost always affect the definition of near objects to a different extent from the way it affects those which are more distant. In such cases it is best to get the negative sharp, and introduce the softness in making the print or enlargement.

The Film-side

THE growing use of cut-film and especially of orthochromatic or panchromatic film of this kind, is an addition to the anxieties of the photographer which all manufacturers have perhaps not realised as completely as seems desirable, says *The British Journal*. The anxiety relates to the difficulty of telling the sensitive side of this form of sensitive material. In the case of plates which are handled in total darkness it is fairly easy to distinguish between the glass and sensitive surfaces by identifying the much smoother surface of the former. But with a film which has an emulsion-coating on one side and a coating of plain gelatine on the other the difficulty is very much greater. In fact we think most people will say that it is impossible to distinguish between the two surfaces by touch. Even if it were possible, nobody wants to finger films before they are exposed, and therefore a means of telling quickly and with certainty which is the sensitive side becomes a practical necessity in the use of such films as are handled in darkness or in a very dim light. There is fortunately a very simple means which the manufacturer can use, namely, the making of a couple of tiny notches in the edge of the film, preferably near to the right hand top corner—on either the short or the long side of the film—when the latter is held with the emulsion-surface facing the observer. Thus if a film is notched in this way, one has only to hold it by the edges and to turn it until the notches are felt to be in the correct position in order to know which is the sensitive side.



COMING EXHIBITIONS

AUGUST 29 to SEPTEMBER 26, 1925. The Second Midland Salon of Photography to be held in the Art Gallery, Birmingham, England. All particulars and entry-forms may be obtained from the Honorable Secretary, Capt. F. C. T. Hadley, Houndsfield, Hollywood, Birmingham.

SEPTEMBER 14 to SATURDAY, OCTOBER 24, 1925. Seventieth Annual Exhibition of the Royal Photographic Society of Great Britain, 35 Russell Square, London W.C. 1, England. Last day for receiving prints Friday, August 14. We have entry-forms and shall be glad to mail them as long as they last, to any readers who will send two cents in stamps for postage.

NOVEMBER 1, 1925. New Zealand Photographic Salon, Dunedin, under the auspices of the Arts Committee of the New Zealand and South Seas International Exhibition, 1925-26. The Salon will be housed in a specially equipped building. Last day for receiving prints, October 15, 1925. Entry-forms may be obtained from the High Commissioner for New Zealand, 413-5 Strand, London W.C. 2, England, or from H. M. British Trade Commissioner, 285 Beaver Hall Hill, Montreal, Canada. We have a few entry-forms which we shall be glad to send to any of our readers.

JANUARY 16 to 31, 1926. The Seventh Annual Salon of Photography to be held at the Albright Art Gallery, Buffalo, N.Y., under the auspices of the Buffalo Camera Club. Entry-forms and other information may be obtained from Lester F. Davis, secretary, 463 Elmwood Avenue, Buffalo, N.Y.



THE PICTURE-MARKET



There is a market for every good photograph. The amateur and the professional photographer have the opportunity to sell good pictures and to derive financial benefits from their camera-work. To make this department accurate and reliable we have requested and obtained the hearty co-operation of the editors. We make no claim to publish a complete list of the market, each month; but the names of magazines that appear below we know to be reliable and in the market for photographs at the time of going to press. We have obtained our information direct from the editors themselves.

New York Times, Mid-Week Pictorial, and Wide World Photo Service, 229 West 43d St., New York City, N.Y. Charles M. Graves, Art Editor. Wants news photographs. Size unimportant. Glossy prints desired. As little descriptive matter as possible wanted. Pays for accepted prints; *New York Times*, \$10; *Mid-Week Pictorial*, \$5 per print; *Wide World Photos*, \$3 per print, on acceptance.

House and Garden, 19 West 44th St., New York City, N.Y. Heyworth Campbell, Art Editor. Wants photographs of houses, interiors and gardens. Size 5 x 8, glossy. Needs about twenty-five words of descriptive matter. Write the magazine as to its requirements before submitting prints. Pays \$3 to \$5 each print, on acceptance.

American Farming, 537 South Dearborn St., Chicago. Paul Stephens, Art Editor. Wants agricultural photographs. Size, 5 x 7 inches. Cover pictures, 10 x 12 inches. Glossy prints wanted. A good story will help sell the picture. Stories must be current. Better write the editor before submitting pictures. Pays from 50 cents to \$15, on bills rendered. Editor writes: "We do not want freaks. Pictures must exemplify good agricultural or domestic economic practices. Farm machinery (tractors, threshers, etc.) can be secured from the manufacturers, and good roads pictures from cement associations, free."

The Farm Journal, 230 South Seventh St., Philadelphia. Charles P. Shoffer, Art Editor. Wants story-telling photographs. The photographs needed for *The Farm Journal* must be interesting, amusing, or tell a definite story. Any size. Cover pictures should be 15 x 20 inches. Glossy prints preferred. Enough description should accompany the picture to accurately describe it. Pays from \$1 to \$3 for ordinary pictures, and \$30 to \$50 for covers; on acceptance.

The World's Work, Garden City, N.Y. R. T. Townsend, Art Editor. Wants pictures of people prominent in the news. Size 8 x 10, glossy. Enough descriptive matter to serve in writing short captions. Write the Editor regarding the requirements of the magazine before submitting pictures. Pays \$1 to \$3 for pictures, on acceptance.

The Farmer, 59 East 10th St., St. Paul, Minn. Berry H. Akers, Art Editor. Wants human interest pictures pertaining exclusively to farm life and farm scenes adapted to the Northwest. Any size. Cover pictures 5 x 7, or in that proportion. Glossy prints wanted. Enough descriptive matter for a caption needed. Price paid depends on the print.

The American Hatter, 1225 Broadway, New York City, N.Y. E. Hubbard, Art Editor. Wants photographs of window displays, store interiors having an idea in the equipment or merchandising of hats. Pays \$2 if acceptable.



THE PUBLISHER'S CORNER



No Address—No Signature—No Answer

ON my desk there lie several important letters to which I would gladly give my personal and immediate attention; but my efforts to be of service are thwarted by the oversight of my correspondents. Frankly, how can I answer a letter without any address whatever in it, on it or about it? Also, how can I reply to a correspondent who gives me his address but does not sign his name? Yes, we try to find the names of these good people on our subscription-list, mailing-list and in our correspondence-files—we do our best always to answer letters, but sometimes we are helpless. Then, what happens? After several days or weeks, the author of the letter, which is without address or signature, informs us that he or she considers that our reputation for prompt attention to correspondence is greatly overrated. Really, sometimes it seems unjust to be taken to task for the oversight or negligence of others; but then, it seems to be part of a publisher's lot. If those of my readers who feel that a reply is a long time coming, will try to recall whether or not the correct address was given me and the letter properly signed, they may understand the delay, write me again, and thus give me the opportunity to do my part.

Those Criticisms of Competition-Pictures

THERE are a number of pictures waiting to be criticised, and I am afraid that some of the contestants in the recent competitions may wish that more prompt attention were given this matter. Well, let me say that July and August are vacation-months. Many visitors, subscribers, and advertisers visit our publication-office in Wolfeboro and we are glad to welcome them and to make them feel at home. These pleasant interruptions have their effect upon the amount of work that is done during the day. I am sure that my readers will be patient and not begrudge me the very real pleasure of meeting so many delightful men and women who have taken the trouble and the time to call.

Moreover, during July and part of August there is additional pressure brought to bear upon me because of the necessity to prepare two issues, virtually in the same month, owing to my absence of fifteen days on active military duty at Chanute Field, Rantoul, Ill. Hence, if print-criticisms seem to be lagging behind for a bit, I know that my readers will understand, co-operate and thus render a real service to me at this time.

"Photo-Era" Trophy Cup for Camera Clubs

ELSEWHERE in this issue will be found an announcement of a new competition which it is hoped will stir up activity among camera clubs and photographic societies and tend to encourage the establishment of new clubs. It will be noted that the award of the PHOTO-ERA TROPHY CUP is confined to organised camera clubs or societies in the United States or Canada. This is not done to be exclusive or to give the cold shoulder to the many splendid clubs and societies elsewhere in the world, but rather to help the United States and Canada to attain a proportionate

number of well-organised, wide-awake and prosperous clubs. Most other countries are far ahead of the United States and Canada in the number of established camera clubs. We have some of the leading workers and some of the best camera clubs in the world in North America. What we need right now is more of both, greater sustained enthusiasm and a slow, firm building up of splendid, permanent clubs.

It Happens at Times

SOME time ago I recorded the fact that the preparation of each issue of PHOTO-ERA MAGAZINE, although a pleasure, was not always destined to work out as the Publisher planned. Mechanical, typographical or editorial problems have to be solved regarding which the average reader knows very little. To be sure, he likes or dislikes a particular number; but he may not know that the printer, engraver, binder, paper-house, editor and publisher have striven honestly and painstakingly to do their best, even with the very issue that may be "not so good as last month", according to some critics. Why say anything about this at all? Well, there is an old saying—something about stealing the other fellow's thunder.

Stereo-Department Left Out This Month

OWING to the interesting article on stereo-photography by A. Jupenlaz in this issue, and owing to unavoidable delay in getting the necessary halftones made for some material, the usual department, "The Stereophotographer" is omitted this month. However, the articles which will appear in this department next month will make up for the omission.

Incidentally, recent correspondence from overseas indicates that stereophotography is gaining ground steadily and that pictorialists, as well as average workers, are taking up this fascinating branch of photography in increasing numbers. In this connection let me urge my readers to obtain the latest catalogs from Harold M. Bennett, R. J. Fitzsimons Corporation, O. H. Sampson, Motion-Picture Apparatus Company, Herbert & Huesgen Company, Eastman Kodak Company, Pinkham & Smith Company, Charles G. Willoughby, Abe Cohen's Exchange, Central Camera Company and other dealers and manufacturers who are specialising in stereo-cameras and accessories. Even though the reader may not be interested at the moment, he owes it to his photographic education to learn of the remarkable equipments that are now available at prices to suit all purses.

How to Organise a Camera Club

UNDER this title we will publish an exceptional article in several parts by E. H. Brown, former secretary of the Dallas Camera Club, Dallas, Tex., and now vice-president of the Associated Camera Clubs of America. Mr. Brown knows whereof he writes from practical experience and his article will be of great value to all those who are camera club members or who wish to know how to organize a good camera club. This feature will begin in the September, 1925, issue. We anticipate an extra demand for this article and suggest placing orders for additional copies at this time. Every camera club officer should have a copy.



SUNBURST
WILLIAM S. DAVIS



PHOTO-ERA MAGAZINE

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What the Photograph Means to the Magazine

MARY FENTON ROBERTS

(Editor of *Arts & Decoration*, New York City)



WHEN we say that we are becoming a "picture-book world", we simply mean that every month more photographs are used for magazines, for newspapers, and more motion-pictures are put on the screens. It is the photographer who is changing the aspect of the library, the stage and the morning-paper.

I believe that the title of this inadequate address is "The Value of the Photograph to the Magazine". The value is so enormous that it is very difficult to give any impression of it without pages of statistics and interviews with a dozen editors, without exhausting my audience with facts, and bewildering myself with figures, because the moment that I begin to talk about percentages, my mind seems to revert to its early days in arithmetic classes—either a blank or a profound desire to go to sleep.

However, I can understand figures from my own magazine, that is, with the help of my secretary, and this morning we went through the entire file of 1924 to see what proportion of photographs were used as against drawings, lithographs, etchings, monotypes, charcoal-sketches, and so forth, and I discovered that over 65 per cent. of our illustrations were photographs, in other words, in 1924 we used 1031 photographs in the editorial section alone as against 157 drawings. This did not include the cover, nor did it include the large number of photographs used in the advertising-section.

I know that since the beginning of 1925 we have greatly increased the number of photographs throughout the editorial section; and I am happy to say also in the advertising-section, as *Arts & Decoration's* advertising is increasing monthly. This is our little bit of publicity, although I didn't really promise it to the advertising department of my publication.

The magazines once having acquired the habit of making their publications "picture-books", and the great reading-public having thoroughly acquired the taste for getting their pleasure and information through pictures much more than through the printed word, I am not sure that the great bulk of magazines could survive the publishing of magazines without photographs. Nothing could take their place. Very few magazines could afford to illustrate with drawings, steel-engravings and lithographs; and there are certain phases of human emotions that could not be quickly enough captured without photographs. Also the pictorial reporting of art-galleries, of various sorts of other exhibitions, of human-interest stories all over the country, could not be achieved without the present extremely interesting, swift, comprehensive and intelligent reproduction of life known as photographs.

Take, for instance, that magnificent and most significant exhibition that has just closed—the Exposition of the Architectural League and Allied Arts. What would the magazines and newspapers have done without the process of photography. The getting together of such an exhibition was monumental, and I should say that of the 4000 exhibits, at least 75 or 80 per cent. was the presentation of photographs. Then the channel from that show to the magazines and newspapers again is a question of photography. Personally, I shall use from time to time, from month to month, some seventy or eighty photographs made at the exhibition, and I think readers of this magazine all over the country will find inspiration for the building of their homes, the fitting and furnishing of their homes, the making of their gardens from the articles which we will carry and which could not be put over successfully without photo-

graphic illustrations. Of course, we will *write* about this exhibition, but it is the photographs that will do the trick for us.

To me it is intensely interesting to realise the great educational value of photographs used for exhibition-purposes, as well as through the medium of magazines and newspapers. The photograph has done as much to spread a greater knowledge of the greater arts through this country as the broadcasting of music has for the understanding of the finer achievements of the great composers. In our museums, in our schools, in our homes, all over this country, the photograph has brought a wider appreciation of painting, sculpture, architecture, interior-decoration and the industrial arts. In other words, it is the great bridge from the creator of art to the user of art, and is doing what the printed word *only*—with all due respect for the printed word—could not accomplish and could not hope to accomplish.

For people who do not live in great intellectual centers—if we may so speak of our large cities without evoking a smile—the photograph and the radio are the great opportunities for mental and spiritual enjoyment. I do not mean, of course, that the photograph, any more than the radio, invariably does this; but it is one phase of its enormous activities. It, of course, is apart from the magazines and the newspapers that the accomplishment of the photograph is so stupendous that it is impossible to speak of it without the mind winging its way out through the dozen different channels of its activities.

The increasing vogue of the illustrated periodical and newspaper bears witness to the fact that the photograph, to a certain extent, is changing certain phases of our civilisation or, at least, is so in line with our changed civilisation that one is willing to believe it has somewhat dominated it. The world today is in a hurry and the message of the picture reaches us more directly at the cost of much less mental effort than does the message of type. Reproductions of photographs in periodicals, therefore, have at least this great value over the printed word, photographs are more direct, more economical of mental effort; they make less demand on the brain, and the printed word is thus, to an extent, being relegated, except for certain types of the ultra-intellectual books and periodicals, to a secondary place.

The reason the pictorial periodical has succeeded in asserting itself so definitely—and I fancy permanently—as more satisfactory than the printed word, is that theoretically the idea in the printed word must be translated into a sound and then into an object before it is fully

realised by the mind. As for instance: We see the word “hat”. We visualise the hat, and then we think of the sound of the word. Whereas we see a picture of a hat and the process is completed in one mental stroke instead of three. Thus it is easier to reach the attention of a hurried audience with a pictorial presentation of an object rather than the printed verbal description, which must go through a slower process in its attack on the mind of its audience.

Perhaps that sounds a little involved; but it is the way I have figured it out and to a degree have accounted for the perfectly stupendous success of the photograph in this stupendously hurrying age of ours.

The magazines that have big circulation today are all what I call the picture-book periodicals, and except in the case of the entirely fiction magazine, these publications must depend for their illustrations almost entirely upon photographs. And even the fiction magazines have been experimenting with photographic illustrations—as yet, I must say, not wholly to my personal satisfaction. Because the idea has seemed to be to pose *famous people* for the heroes and heroines of stories, and these famous people do not appear to make any great effort to fit into the story, but rather they wish to look very pretty and smart so far as the women are concerned and very elegant and up-to-date so far as the men are concerned. And the result is, illustrations that are what I imagine are called “snappy”, but that must cause the writer to tear his or her hair when it has not been cut too short.

Whereas, the illustrator sometimes has been known to read a story and take a great personal interest in it and draw men and women who express the idea of the writer, who express the emotions the writer has put into his story, and the result must be more satisfactory, if less surprising to the author. However, all this is the fault, not of the photographer, but of the director of illustrations for that particular magazine and there is no reason at all that lovely, appropriate illustrations for fiction could not be accomplished by an intelligent art-director who may have read the story and who has a sympathetic attitude toward the author.

So far as newspapers are concerned, they also rely almost entirely upon the photographer for all illustrations, for the Sunday issues as well as the daily papers, with the exception of those curious and sad pages known as the comic supplements.

I feel that I would very much like to speak here of the photograph as a phase of art, because I am sure that the finer type of photograph is



Courtesy Folo-Revista

TIPO DE GUINEA
P. LALLEMENT



THREE WAGONS

H. KISA

HONORABLE MENTION—MISCELLANEOUS COMPETITION

as personal to the photographer as certain kinds of painting are to the artists. I have attended a great many photographic exhibitions both here, in London and Paris, and always I find the individuality of the man who has done the work, coming through the photographs, his attitude toward life, his interest in art, his knowledge of the science of his profession. There can be no question but that the finer photograph reveals the man back of the camera just as the greater painting reveals the nature of the man who handles the brush. This, of course, brings about an infinite variety in photography, just as we have an infinite variety in painting and sculpture. And just as we have the modern feeling on canvas and in marble, so the camera also reflects the curious whimsicalities of the day. In fact, I find the photograph moving along through all the new ideas, new feelings, new impulses toward life, that are reflected in the various other arts of our time. And that is why a magazine can use photographs for 70 per cent. of its illustrations without monotony in the result.

I should like to speak here of the absurd idea that seems current among most editors, and

for that matter among most photographers, intelligent as they are—that only glossy prints will reproduce. I believe this is true for newspaper-work and for magazines of huge circulation; but for magazines that take the time to secure the best possible cuts and that are printed on flat presses, there is no reason in the world why beautiful sepia prints with their wonderful lights and shadows, their charming mysteries and sensitive reproduction of beauty, of art, architecture and nature, should not be employed much more widely than at the present time.

Also, I have found that where a magazine seems to be using poor photographs for their illustrations, 50 per cent. of the time the editor and the engraver are at fault. Good photographs have been brought in and good results have not been insisted upon. And even in some instances where an editor can only procure poor photographs from old family-collections, or that illustrate autobiographical sketches, or curious little snapshots are the only pictures extant, interesting effects can be gained from one and all of these photographs, if the editor will take the time and the work and use his imagination.



LORETTA

CHARLES CLAYTON, JR.

HONORABLE MENTION—MISCELLANEOUS COMPETITION

An editor should know how to retouch photographs in an artistic fashion, that is, with the use of Chinese white only. I remember once, years ago, when Julian Burroughs was doing a series of articles for me about his father, John Burroughs, the articles were delightful but the only photographs procurable of John Burroughs' early days and activities were tiny little prints that had grayed off, though carrying fairly good detail. I took these photographs and retouched them with Chinese white, no black whatever, just lifting all the highlights until they were very high, which deepened the shadows by contrast, and then I enlarged them from ten to twenty per cent. And the result was illustrations that had the quality of watercolors, as though someone had made beautiful pictures of John Burroughs and his home years ago and I had the good fortune to find them in their original beauty.

I shall stop right here to say that this is not a plea for poor photographs. I am so interested in the art of photography that I always seek the very best and then to have them reproduced in the very best fashion and then printed with the richest ink; but I do firmly believe that many magazines that appear with poor illustrations gray, wan, futile looking little pictures have suffered at the hands of the editor more often than at the hands of the photographer.

I have sometimes thought that it would be a great idea if the camera were a part of every child's education. I do not mean that every child should become a photographer—in fact, very few probably have the real gift; but I think that education would be greatly simplified if in all our schools and colleges short-hand was taught along with photography and dancing. I think all children are very curious about life,

they like to investigate and I am sure they would like to make records with short-hand and with cameras. Again, I think that all children are born dancers and that life would be infinitely more beautiful, more healthful and interesting if they were allowed to do a lot of dancing when they were little.

I am not sure that this idea of dancing has anything to do with photography; but whenever I think of education for children I always think of dancing. I have never seen a healthy, happy little child that did not at once respond to music, and I think that it is a very important thing to talk about—this question of dancing and little children.

But to return to the subject matter—I believe that the camera should become fundamental in our lives. I believe also that it *will*, not only

educationally but for joy and pleasure, to jog our memories when we are older, just as music today can do that and as many books of poems do it. But again let me say that the photograph means to the editor what our daily bread means to our health and comfort; without the photograph I cannot see the magazine of today, or of the future.

I am deeply grateful for the opportunity of saying these few words to this delightful and interesting audience. I feel also that from my point of view I have not said half enough; but I have yet to find an audience that ever found any speech too short.

[A paper read at the open monthly meeting of the Pictorial Photographers of America at the Art Center, New York City, May 4, 1925.]

A Study in Simplicity

E. L. C. MORSE



HIS picture is by F. J. Mortimer, one of the best English pictorial photographers and is an excellent example of simplicity and directness in handling an ordinary theme. I am not an artist myself, cannot draw, paint or model figures. What I have to say is merely to note the points that are very obvious to any student who will stop, think and ponder on the elementary principles of the pictorial art.

Looking at the picture, let us ask ourselves, Is the message, thought or emotion sought to be conveyed, clear and distinct? Are there any distracting details that lead thought away from the main point? Do there seem to be any unnecessary or puzzling side issues? Seemingly not. In fact there are in the picture only: horse, man, girl, sky and grass. To bring out the importance of this idea, let us suppose that there were, for instance, an automobile tire, a broken chair or a plank lying on the grass in the foreground. What would be the effect? Evidently distraction of the mind. In fact, one would immediately begin to conjecture what those things had to do with the main point. Having none, they would weaken the message sought to be conveyed. But in this picture there is nothing of the sort. Everything pulls together, seems to be congruous and fitting and helps to bring out the main idea. Nothing superfluous, nothing distracting, everything counts. Economy and simplicity—in other words, Art!

Let us now consider masses and lines in this picture. Is the girl, the horse or the man exactly

in the middle of the picture? Is too much or too little or just enough space devoted to the foreground? Does the foreground clamor for attention? Is it suitable and appropriate for the main interest? Is it complicated or is it simple? The answer to these questions is obvious, and the lesson that the answer conveys is worth noting. These principles are simple and obvious; but they are often forgotten, by the average worker and when forgotten, they ruin a picture.

To reinforce this lesson, let us suppose that the foreground, instead of being grass, were asphalt or brick. Now it is perfectly natural that a girl should be riding bareback without a hat in the fields—but why should she be riding thus attired on an asphalt pavement? There is something incongruous about the combination. An asphalt-road suggests automobiles moving swiftly. Two currents of thought are set up and one asks why should there be such a road in such surroundings, and if there were such a road, the girl is in danger. Such thoughts distract. Why? Because one part of the picture suggests one idea, and another part suggests another totally different. Hence bad art, because it is incongruous.

Further, suppose that the artist had made the picture when the forelegs of the horse were close together—or the man's feet were close together; what then? The idea of motion would have been lost and the girl would seem to be sitting on a motionless horse—a sort of animated statue. But why an animated statue out in the open fields? Behold the mind again running



HILLTOP

F. J. MORTIMER, F.R.P.S.

along a distracting train of thought, foreign to the artist's purpose!

Let us go further and suppose that the horse's mane or tail were adorned with braids and ribbons. "Oh, going to the horse-show—or returning. I wonder which it is. Must be going—no, more likely coming back. M-n, English Shire horse, or may be Ayrshire—no, it's too small for an Ayrshire." And so forth and so on. Let's suppose that the girl were dressed in fashionable urban attire. "What is she doing out in that field? Where is she going? Taking her home? Wonder if she fell in the ditch—or maybe she was in an accident. Still, they don't seem to be in a hurry—I wonder what's up." And so forth and so on to the end of the chapter. Distraction—interference, as they say in electric circles—gears don't mesh, as they say in automobile jargon; bad art again.

Let us consider the background. Suppose it had been a white fence with distinct white palings. Suppose it were a high board-fence? Even suppose the fence had advertisements on

it—"Go to Jones for Hardware" or "Smith's for Soap", or, worse than that, imagine Barnum and Bailey's Circus depicted—a lady in tights on a wire rope, etc. Horrors! Or, suppose that a peaceful flat country were shown, with tall poplar trees and a Dutch windmill, etc. This latter would not be so bad, but the suggestion of freedom, space and openness would be lost or in a large degree abated.

As it is, we have abundant, simple and natural clouds—unobtrusive clouds; clouds that by their presence suggest the idea of height, because we see nothing but clouds beyond the figures. Still, there is considerable more art in those clouds than one would think at first sight. Suppose that the girl's face were against that dark, open space in the white clouds, would it come out just as distinctly as against the white clouds? To be sure, the horse's head is against the dark space, but is the horse's head so important as the girl's face? And by the way, notice that the horse's nose is white and is thus not lost against the man's dark clothes. Pure accident? Hardly!

Suppose that the man were not there—how about balance? How about that sort of a half circle that the figures form? Any particular reason that the ground should slope up? How about that sort of a triangle of white formed by the white feet of the horse, the girl's white stocking and her white jacket? Note the strap running from the horse to the man, and the angle of the man's pipe. Pure accident? Hardly! Suppose the man were about three feet ahead of where he stands—how about a break in continuity? Would a dark grass be as satisfactory as the light one in the picture now? Let the student stop and ponder over these points. Let them sink into his mind until they become part and parcel of his artistic consciousness.

Very well, we have been talking about what the picture does *not* represent; let us see what the picture *does* represent.

The title is "Hilltop". No doubt about the correspondence between title and facts depicted. A healthy, strong farm-horse out in the field with a man whose dress and attitude suggest in a convincing way that he is the groom or may be owner of the horse. A girl about twelve years old is astride of the horse, manifestly fearless as children are at that age, and enjoying the fresh air and horseback ride to the utmost. Probably

a novel and delightful experience for her. But the man takes it as a most matter-of-fact business that he should be outdoors with that horse. He is evidently accustomed to horses and outdoor life. He looks the part to perfection. So does the girl. So does the horse.

I have studied this picture for hours on my study-wall. I don't think I am reading into it what is not there. One of the functions of Art is to conceal—the evidences of—Art. This picture is so simple, so direct, so apparently artless, that it is worth detailed study—to see what is in it and what is not in it. It is a very artfully artless and artistic piece of work, and the man that made it is a master workman who is famous for his skill in pictorial photography.

It is not a picture that causes the heart to beat faster, as of a regiment charging a fort. Nor has it the pathos of domestic life;—a boy leaving home, for instance, to make his way in the world. Nor is there the lyric beauty of a quiet landscape with trees, grazing kine and babbling brooks. No brilliant dash of sunshine on foliage, luminous shadows and gracious half-tones enchant the senses. On the contrary, a simple silhouette—clouds, grass, horse, man, girl; that's all. Simplicity, directness, economy—a masterpiece of its kind.

Photography in the Desert

JACK MOORE

"Out in the Far Away there is a desert,
Of restful peace and silent beat of time;
Where distances inspire to broader vision,
And stars, too large, impel to awe sublime."



THE desert-region has always possessed a peculiar fascination. There is a vastness about the great "wasteland" that grips the imagination, a solitude and silence strongly appealing to one accustomed to a busy life and much human contact. The impressive distances and grand panoramas tend to take one out of one's self, as it were, and make one forget for a while the cares and responsibilities of a civilised existence.

To the photographer, the desert is an Ali Baba's cave, an inexhaustible storehouse of treasure to be had for the taking. The greatest difficulty lies in deciding what to take and what to leave, for everything is picturesque. The innumerable strange growths, the curious conformations of the desert-mountains, the sand-

dunes marching on "to infinity", the colorings, and the ever-changing newness and brilliance of it have a wonderful appeal to the photographic eye of the camera-enthusiast. And the eye is only too frequently deceived. The desert is a land of optical illusion and mirage. It is a place of wonderful opportunity for the amateur photographer, as I have discovered.

I arrived in Imperial Valley on July 26 last, accompanied by my trusty Ford, my hitherto-fairly-foolproof Kodak, and other accessories. It was a summer-day. The thermometer in an office in Calexico, with two electric fans buzzing industriously, registered 115 degrees. I didn't make any pictures for the first few days, but busied myself with a pitcher of ice-water and a palm-leaf fan, dressed very negligee. Between times, I inhabited the bath-tub.

However, I soon became acclimated, and "Lizzie" and I began flitting hither and thither about the desert, joyously snapshooting 'most everything in sight. Six rolls of film were



GLIMPSES OF THE DESERT
JACK MOORE

exposed before stopping to develop. Then the fun began. I had all the usual hot-weather troubles and some others. My thermometer told me the water was 96 degrees, while "the book" says that 70 is the limit. Considerable manipulation of the developer-can in a tray of ice-water was necessary to keep the developer at something near the correct temperature, not very accurately either. I still think some of the film was defective to begin with, although I didn't write the manufacturers about it; but however that may be, the percentage of passable prints possible from the thirty-six exposures was small.

Since that time, I have experimented continuously and have arrived at the conclusion that photography, like human nature, is a great study, and that desert-light is the most deceitful thing I've met so far. The "altitude" of from fifty to two hundred feet below sea-level may contribute to the deception.

Sunlight on the desert cannot be described by such terms as "good", "bright", "intense"; it is "glaring". The sand, especially among the sand-hills, throws back the glare with frequently disastrous results to film. There is no humidity, and the atmosphere is extremely rarified. Distant mountains and other objects appear to be much nearer than they actually are, and the desert-nights are famous for their unusual starriness, the stars seeming larger and brighter than in any other region.

Another consideration in figuring exposure is color. In other parts of the country, there is usually some density, greens, blues and dark tones on ground and trees. In the desert this is lacking. There are no sharp colors. Everything is colorful with delicately blended colorings that are faint. Trees and shrubbery are "smoky" in appearance, and sand and ground are flat—something near a "huckleberry-dun" color. Overexposure is very easy under these conditions.

So the "lowdown" on the proposition of shooting pictures on the desert is this: A highly rarefied atmosphere, unusually strong sunlight, light ground and objects with no heavy shadows—there are really very few things in the desert that would cast a *heavy* shadow anywhere. And less exposure, either by stopping down or using a faster shutter-speed, is the answer I get. With the distances possible, more depth and detail is gained with the smaller stop than by using a higher speed with a larger opening.

For example, the accompanying print labeled Fig. 1 is a typical desert inhabitant, the ocatilla, blooming on the desert near Coyote Wells. The temperature was something over 100 degrees, to

be conservative, and just enough hot wind was blowing to gently wave the tops of the canes. Exposure given was 1/50 at F/16.

The camera used for this and the accompanying pictures was a 3A Eastman Kodak, F/7.7 anastigmat lens and Ilex shutter, using roll-film. All films were developed in a Kodak film-tank with either Eastman Special Developer or Nepera Solution and Auxiliary Powders; printed on Azo F-3 with M-Q tube developer.

I have had success in some instances using an Eastman color-filter, which is rated as a 7-times filter. In use under the conditions explained above, about one-half the time recommended is usually sufficient. Fig. 2 is Carrizo Mountain at the entrance to Painted Canyon. The mountain is colored in many shades from sand-yellow to reddish brown and the smoke-tree and bushes in the foreground are silvery-white. Exposure with filter, 1 second at F/32. Fig. 3, a close-up of a smoke-tree, was given 1/5 at F/16 using the filter.

My sand-hill pictures, to my notion, still leave much to be desired, but Fig. 4 is a good specimen of the ripples and "wave-crest" that appear on many of them. "Soft-focus effects" are easily obtained on sand-hill photographs, and clear definition is rather difficult. Exposure, 1/25 at F/11 about 4.30 in the afternoon. Fig. 5, another sand-hill on the Yuma highway, was exposed 1/25 at F/16.

Fig. 6 shows the steep "face" of one of the marching dunes and the burying of the greasewood bushes. Time, 1/25, F/11.

There is a world of wonderfully scenic stuff in the desert-mountains and the many canyons and washes leading up into the surrounding ranges. One of the best is Painted Canyon, a deep gorge-like cut which winds deviously from the floor of the desert almost to the top of Carrizo Mountain. Considerably more exposure is, of course, necessary within the canyon walls. Fig. 7 was made about 3 P.M., exposure 1/5 second, F/22. Fig. 8 is a curious rock-formation on the west wall of the canyon which was snapped without noticing until the picture was printed that it has a strikingly "froggy" shape. About 4 P.M., 1/10, F/16.

Just a few days ago, I staged an expedition over to the west side of the Valley in pursuit of a desert-sunset, and captured several. Some of them would be all right, perhaps, if you could tell what they are, but two or three look like midnight, and two or three others look something like the inside of a dynamite explosion, if you can imagine it. The clouds were thin and the color-filter doesn't work so well against the sun. Fig. 9 was given the fastest time without the

filter, $\frac{1}{2}$ second at F/32, sun behind cloud. Fig. 10 was made just after the sun slipped behind the mountain and was given 4 seconds at F/32. I expected a silhouette from this last one and was agreeably surprised at the detail in the picture.

If one should tire of "desert-stuff", there is a wealth of picture-material within the Imperial Irrigation District, comprising over 600,000 acres of land besides being the famous birthplace of "Barbara Worth". The canals and rivers are the most important and one of the most interesting features of the "domesticated" desert. Beautiful eucalyptus and cottonwood-trees border the canals and roads, and the irrigated fields of cotton, corn, lettuce, melons, grape-fruit trees, etc., with the numerous herds of dairy cows pasturing on the alfalfa fields, offer pleasing

possibilities. There is naturally more contrast and more time can be given to impress the darker subjects and denser tones of the landscape.

Fig. 11 is one of the main canals of the District and was made about 10 A.M., stop F/16, 1/25. Fig. 12 is a bend of New River, the channel cut by the flood waters of the Colorado River which poured through the Valley in 1905-07. This was given 1/10 at F/22.

And, not forgetting that "balance" which the experts say is so important in pictorial composition, I again quote from my poet friend who cleverly pictures the desert without the aid of a camera:

"The desert purifies and shrives and blesses.

What if grim bones are scattered here and there?

We come again, her sovereignty unquestioned,

To where she beckons, "Welcome" and "Beware!"

How to Organise and Maintain a Camera Club

E. H. BROWN

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WHY are there so few camera clubs in the United States? The 1920 census figures show that Great Britain had a population of 42,917,382. Territorial United States had 105,710,620 people, or more than twice as many as our British cousins. Great Britain, a country which in territory and population is much smaller than our own, boasts hundreds of camera clubs and photographic societies, but the United States, according to the *American Annual of Photography*, has but sixty-seven. This, in spite of the fact that light-conditions and climate in Great Britain are far less favorable than in the United States.

Every city in this country with a population of 20,000 or greater is sufficiently large to support a camera club. There are four hundred and three cities of this size and, therefore, three hundred and thirty-six of them are without camera clubs. A few of the larger cities have more than one camera club, so that it is probable that there are at least three hundred and fifty cities in the United States which should have camera clubs.

I. Necessity for More Camera Clubs

If photography, and especially pictorial photography, is to progress, we must have more camera clubs. Professional photographers, except in a few isolated cases, have done little to advance the art. The pictorialists of the future must be

developed among the camera club members of today. The more successful camera clubs we have, the greater will be the promise of ensuring photography against a lack of future salonists. The greatest advances in photography have come from the research and experimental work of the amateurs; and, in a few cases, from the manufacturers, but the professional photographer has contributed little. The attitude of the professional is "Let the other fellow try it. If it goes, I'll adopt it." It seems apparent that further strides will come from the same sources.

Working alone, the amateur has little to offer. Lack of association with fellow-enthusiasts is a handicap which tends to diminish interest and, as a consequence, improvement. Absence of competition causes stagnation of originality. Failure to view exhibitions of other's work induces false standards of value. The camera-club member, interested in photography solely as a diverting and instructive hobby, is the logical source of photography's future development. The camera club is the amateur's clearing house—the incubator of future salonists.

It is not the easiest thing in the world to organise a camera club, and it is still more difficult to maintain one. Camera-club members are, as a class, as temperamental as other artists. To keep the members pulling together, to maintain harmony, to ensure a smoothly working club is a task requiring diplomacy and sound judgment. Little rifts in the good fellowship of



PATH THROUGH THE DUNES

E. L. HOOPER

HONORABLE MENTION—MISCELLANEOUS COMPETITION

the club have a tendency to widen into irreparable breaches. If these differences are stopped in time, no damage will result. But numerous clubs have disbanded because of an inability to check the trouble before it was too late.

Properly conducted, however, there is no reason that a camera club should not become a permanent institution. There are in the United States several camera clubs twenty-five years of age. They are in a prosperous and healthy condition. There are many more which have been successfully conducted for from ten to twenty years.

This article is written with the hope that it may be instrumental in encouraging amateurs in some of the cities, at present without clubs, to organise photographic societies. Some may be begun and later fall by the wayside; but others will continue to flourish for the good of their cities, the benefit of their members, and the profit and advancement of photography. The task is great but not impossible of accomplishment. And the returns are well worth the effort involved.

II. Purposes of a Camera Club

No camera club, it may be safely stated, is organised solely for the purpose of raising the plane of photography. Nor is the possibility of making discoveries for the advancement of

photographic practice of serious concern to the individual. The purposes are more selfish, despite the high sounding phrases usually embodied in the constitutions of the clubs. The purposes of a camera club are fourfold. First, to improve the work of the individual through contact with other members. Second, to learn more about the hobby by association with fellow-enthusiasts. Third, to exchange ideas among those who may have discovered some new process or short cut. Fourth, to advance generally by seeing the work of other photographers. In each case, it should be noted, it is the individual who hopes to benefit from the camera club. It follows that, to be successful, the club must be so organised and operated that each member will feel he has made a profit from his investment of time and money.

Other purposes of a camera club may be somewhat more altruistic. Some clubs do more than maintain programs calculated to sustain the interest of the members. They attempt to educate the "button-pusher", the amateur whose interest in photography lives—and dies—with the corner drug-store photo-finisher. They attempt to popularise photography with the apathetic mass of camera-users. Such a club is a highly useful organization because its efforts are devoted to entirely unselfish purposes which have for their object the dissemination of photo-



THE ECLIPSE

DOROTHY JARVIS

graphic knowledge among that class of people from which must eventually be recruited many of our future salonists.

The patriotic motive may also figure in the activities of a camera club. This purpose evidences itself in boosting the city in which it may be situated. A club imbued with this commendable purpose so arranges its activities that its parent city receives the greatest possible amount of publicity therefrom.

These and many other motives may be said to be the purposes of a camera club. Some clubs may be entirely selfish and self-centered. Others may choose to embrace one or several more or less idealistic purposes, and a few bar nothing which in any way, no matter how remote, may serve to popularise our hobby.

Briefly, then, the purposes of a camera club are:

1. To increase the individual's knowledge of photography.
2. To aid the non-member in solving his photographic problems.

3. To popularise photography among the "button pushers".

4. To boost the parent city.

III. Types of Camera Clubs

Although there are many varieties of camera clubs, they may be conveniently cataloged into three distinct classes.

Class A. This is the highest type of camera club. The Class A club may rent club-quarters or even own a club-building. The club-rooms are completely equipped with darkrooms, enlarging-apparatus, studio, library and, in fine, everything necessary to the greatest ease and enjoyment of photography. Its activities are many and varied and its membership is necessarily very large.

Class B. This type of club may be as large and embrace as many activities as the Class A club, although this is not usually the case. The Class B club does not maintain darkrooms, studio and the other facilities for the efficient practice of photography. It usually maintains

a small club-room where the members meet and exhibitions are held; but the club-rooms are little more than a meeting-place. It may either maintain a permanent club-room or simply rent a community club-room on certain nights. With the exception of equipment and headquarters the Class B club may in every way be as excellent an organisation as the Class A club.

Class C. This is the camera club consisting of a few individuals who meet occasionally in the members' homes to discuss their hobby and see each others pictures. The Class C club seldom has exhibitions and competitions and is little more than a group of personal friends who chance to be interested in the same hobby.

All camera clubs begin as Class C clubs, a few individuals banded together for mutual pleasure and education. In a short time, they discover that they have exhausted their resources and the keen pleasure of meeting together has dulled. Then, either one of two things occurs. The club dies of inertia, or the founders decide to add more members and form a larger organisation. If the club is to grow into a more complete body, it becomes necessary for the members to decide whether or not the club shall advance to the A class, or simply be content to remain a Class B club.

There are numerous arguments in favor of both types of clubs. In order that any readers who may intend to organise a club may understand the peculiar advantages and drawbacks of each, they are briefly outlined below.

The Class B club, renting no more than a small meeting-room, or the occasional use of a community club room, has but little expense. It naturally follows that initiation-fees and dues are correspondingly low. Reduced costs may result in augmented membership, it is true. But it may also have the effect of adding a class of members which may not be desirable unless rigid membership-requirements are established. The club without darkrooms or other facilities signifies that a large percentage of the members are not interested so much in these things as in competitions and exhibitions. They prefer to do their actual photographic work at home.

This presupposes members who have the facilities and finances to maintain their private photographic establishments. Members who join a camera club solely to avail themselves of the club's equipment, but contribute little to the general welfare of the member-body are not so apt to be found in the Class B club.

The Class B club is more flexible and less top-heavy with dead-timber than the Class A club, and the latter usually has greater financial ability to carry out its programs.

The Class A club has every facility and inducement to offer members. These inducements signify a greater cost to the members. The higher the membership-cost, the less funds the member has to devote to actual photographic work.

The question of darkrooms is an important one. In many respects they are a distinct advantage. They attract many who would otherwise never join the club and a club-dark-room, centrally situated, is a very convenient asset when the amateur is in a hurry whether his printing and enlarging is done at home or not. Yet, darkrooms mean the employment of some one to keep them clean, the replacement of broken equipment, and a heavy drain on the treasury. It is also a well-known fact that those members who are termed advanced workers and salonists seldom make use of this expensive equipment. Their best work is done at home. In spite of the advantages, numerous Class A clubs have found it expedient to abolish the darkrooms entirely while still retaining the studio, exhibition-rooms, library, etc.

This question, then, is one of the first that should be decided upon by the newly organised club. Shall it be a Class A club or a Class B club? If the former, shall darkrooms be maintained for the benefit of a few members?

IV. Organisation

The first step in organising a camera club is the mutual acquaintance of five or six camera-enthusiasts. Having exhausted their own photographic resources and realising the many benefits obtainable through co-operation which cannot be secured singly, the decision is made to form a club. Before the constitution is drawn up, there comes the question of affiliation or independence.

There are several clubs known as the—— Y. M. C. A. Camera Club. In some instances they may have been organised by the institution of whose name they partake. In other cases, however, they are clubs which, in return for various considerations, secure the benefits to be derived through association with the institution.

The club which maintains its independence may have a harder and longer struggle for success. Its membership may grow more slowly. But it is not subject to rules and regulations not of its own making, nor is its individuality submerged in that of the institution of which it becomes a part.

The club which allies itself with an established institution is sure of success from the very start. It has at its disposal an association whose members are interested in all its branches and a good membership is immediately attained for the camera club. It secures valuable financial

assistance while, at the same time, its running expenses are reduced to the minimum. If the organisers of the new club feel that they have not sufficient weight to carry it through to success and satisfactory arrangements can be made with some local institution, the advertising-value of the institution's name is of great assistance.

The decision as to independence or affiliation will, of course, affect the structure of the club's constitution, which is the next step.

Assuming that the decision has been made to remain independent, the following constitution is offered as a model. It may not be a perfect example; but it is practical and is the actual constitution under which one club is operating. It may be used as a guide, and modified to suit local conditions which may affect the new camera club.

V. Constitution

Article I—Name, Object, Etc.

Section 1. This body shall be known and designated as the

Section 2. All acts shall be in the name of the Camera Club and shall be signed by the President and the Secretary.

Section 3. The object of this club is the association together of the membership for the common purposes of a cultivation of an interest in, and understanding of, the art and science of photography, and for the knowledge and mutual benefit to be gained from the practice together of a common interest or hobby.

Article II—Officers.

Section 1. The officers of the Camera Club shall consist of a President, Vice President, Secretary-Treasurer, and Board of Directors. The Board of Directors shall act as a Membership Committee.

Section 2. All officers and committees not otherwise provided for shall be appointed by the President.

Article III.—Election of Officers.

Section 1. The elective officers of the Camera Club shall be elected annually and shall hold their respective offices for one year, except in case of vacancy, when the unexpired term shall be filled at the next regular meeting.

Section 2. Elections shall be held at the regular business meeting of the club on each anniversary of its permanent organisation.

Section 3. All officers shall hold over until their successors shall have been elected and installed.

Section 4. No member shall be elected to office who has not been a member of the Camera Club for a period of one year.

Article IV—Duties of Officers.

Section 1. *President.* It shall be the duty of the President to preside over all meetings of the Camera Club and enforce order and strict observance of the Constitution and By-Laws of the Club, sign all orders on the Treasurer authorised by the Club, appoint all special committees and fill all vacancies unless otherwise provided for, and perform such other duties as may appertain to his office. He shall have the deciding vote in case of equal division, except when he shall have voted on call of the ayes and noes. He shall be ex-officio member of all committees.

Section 2. *Vice-President.* It shall be the duty of the Vice-President to attend all meetings of the club. In the absence of the President, or in case of his death, resignation or failure to perform the duties of his office the Vice-President shall preside and perform all the duties of the President until the removal of such obstacle, or until a member shall have been elected to fill the vacancy. The Vice-President shall be Chairman of the Board of Directors.

Section 3. *Secretary-Treasurer.* The Secretary-Treasurer shall attend all meetings of the Club and keep a record of its transactions. He shall keep a correct record of the Constitution, By-Laws and all amendments therein in a book provided for that purpose, which he shall require all members to sign.

Section 4. He shall keep a correct record of all moneys received and spent by the Club, paying same out only upon order of the Club and over the signature of the President, in addition to his own, except as and in such sums as hereinafter provided.

Section 5. For these services he shall be exempt from dues during the term of his office.

Section 6. *Board of Directors.* The Board of Directors shall consist of two members, in addition to the other elective officers of the club. The Board of Directors shall act as the governing-body of the club, reporting to the club through the Chairman, who shall be Vice-President of the Club, at the regular business-meetings of the club.

Section 7. *Vacancies.* If any elective officer fails to discharge the duties of his office for three successive meetings, he shall forfeit same, provided he is not prevented by sickness or absence from the city; and in the event of death, disability, absence, failure, or resignation of both the President and the Vice-President of the club, it shall proceed at once to fill the vacancies by election.

Article V.—Meetings of the Club.

Section 1. The regular business meetings of the Camera Club shall be held on the fourth (4th) Tuesday of each calendar month.

Section 2. Five (5) members shall constitute a quorum for the transaction of business, provided, that one member shall be the President or Vice-President.

Section 3. Educational and social meetings of the club, as well as meetings for the purposes of exhibitions, competitions, etc., shall be held on such dates as are designated by the committees in charge.

Article VI.—Membership.

Section 1. Any amateur or professional photographer, of either sex, may become an active member of the Camera Club, providing a vacancy exists.

Section 2. Membership shall be limited to one hundred (100) active members, the first twenty-five (25) to be known as Charter Members.

Section 3. Associate members, not to exceed twenty-five (25), may be admitted. Associate membership shall be limited to persons residing outside of the County of and to authorised dealers in or representatives of photographic apparatus and supplies. Associate members shall be entitled to all the privileges of the club and the use of club-property on the same terms as active members, but shall have no right to vote at or otherwise participate in the business-meetings of the club, except they may be granted the floor by unanimous consent. Associate members shall not be elected to office.

Section 4. Honorary members may be elected to membership by the club because of their interest in or contributions to the arts and sciences akin or contributory to photography, or for any other reason which may seem good in the wisdom of the club.

Section 5. Charter members shall pay an initiation fee of \$5.00 each upon admission to the club, after which the fee will be \$10.00. Dues shall be \$12.00 per year, payable quarterly. Associate members shall pay an initiation fee of \$10.00 and annual dues of \$5.00.

Section 6. All prospective members shall be required to make formal application on a regular form furnished for that purpose by the club, which application shall be signed by the applicant and two active members of the club in good standing. All applications shall be accompanied by the initiation-fee and dues for the first quarter.

Section 7. All applications for membership shall be referred to the Board of Directors for action and at the same time posted on the bulletin-board in the club-rooms. The Board of Directors may report on the applications for membership at the next business-meeting following the receipt of the applications.

Section 8. Upon the favorable recommendations of an application for membership by the Board of Directors, the applicant shall be voted on by ballot, two negative votes being sufficient to reject.

Section 9. Any member found guilty of misconduct may be reported to the Board of Directors for investigation.

Section 10. Any member who fails to pay his dues for a period of six (6) months shall be suspended, which suspension shall forfeit his rights of membership. If in arrears for twelve (12) months he may forfeit his membership in the club.

Article VII.—By-Laws and Rules of Order.

Section 1. The club may adopt necessary By-Laws and rules of order or other regulations governing the activities of the club; provided, that nothing therein contained shall conflict with the provisions of this Constitution; nor shall any law be adopted, amended or changed unless the proposition therefore shall have been submitted in writing at a stated meeting at least one month previous to action thereon, and posted on the bulletin-board thirty (30) days. Any rule of order may be suspended during any meeting by a two-thirds vote.

Section 2. For all points of order not covered in this instrument, reference shall be made to Rules of Order.

Article VIII.—Alterations and Amendments.

No alterations or amendments to this Constitution shall be made without the concurrence of two-thirds of the members present at a regular business-meeting, and the proposed alteration or amendment, which must be in writing and signed, shall be read by the Secretary at least one regular business-meeting in advance of final action thereon, and shall be posted on the bulletin-board for thirty (30) days. It shall require six months membership to vote on any change in this constitution.

Article IX.—Dissolution.

This club shall not be dissolved so long as a quorum of five (5) active members in good standing shall object thereto.



EVENING ON THE SKAGIT RIVER

GEORGE M. GERHARD

HONORABLE MENTION—MISCELLANEOUS COMPETITION

Article X.—Adoption.

This constitution shall be in force and effect after its final adoption.

VI. By-Laws

Article I.—Meetings.

Section 1. The regular business-meeting of this club shall be held on the fourth (4th) Tuesday of each month.

Section 2. Educational and social meetings, and meetings for other purposes shall be held on the day or days designated by the committees in charge.

Section 3. All regular meetings shall be held at 7.45 P.M. unless otherwise ordered at a previous meeting.

Article II.—Committees.

Section 1. The President shall appoint all committees and fill all vacancies occasioned by sickness, death, absence from the city, or other cause, unless otherwise provided for.

Section 2. All special committees shall report in writing at the next stated meeting unless otherwise instructed.

Section 3. The Secretary shall furnish the Chairman of each committee with a list of names of the persons comprising such committee.

Section 4. The first-named member of a committee shall be the chairman, unless the committee should decide to depart from this rule and elect a chairman.

Article III.—Standing-Committees.

Section 1. The standing-committees of the club shall be as follows: Committee on Program, Publicity-Committee, Committee on Education, House-Committee, Lantern-Slide Committee, Print-Committee, Exhibition-Committee, Outing-Committee and Competition-Committee.

Section 2. The foregoing committees shall consist of three members each and shall serve for one year; appointments shall be announced by the President as soon as possible after his election at the regular annual meeting and election of officers.

Section 3. The duties of these committees shall consist of the purposes embodied in their names.

Article IV.—General Discipline.

It shall be the duty of each and every member of this club to sustain its officers in the proper discharge of their duties.

Article V.—Alterations.

Same as Constitution.

Article VI.—Order of Business.

1. Call to order.
2. Reading of minutes of previous business-meeting and special meetings.
3. Report of Board of Directors.
4. Election of applicants for membership.
5. Report of Secretary-Treasurer.
6. Report of Standing Committees.
7. Report of Special Committees.
8. Receiving communications and bills.
9. Unfinished business.
10. New business.
11. Election and installation of officers.
12. Adjournment.

VII. Election of Officers

After the constitution and by-laws have been formulated and agreed upon comes the important matter of electing officers. Right here is made the decision which will make or break the fledgling camera club. The officers should be chosen with care. They should be men capable of advancing the best interests of the club. Further, they should be willing to devote their time to the work. Men who have the interests of the club at heart and are willing to make the organisation a success are needed.

A new club officered by men who are prone to "Let George do it" is doomed to failure from the very beginning. The club's first officers should be camera enthusiasts. Men of this type are the only ones who can assure success. If possible, too, the first officers should be men of some local importance. In this case, the club receives the benefit of the advertising-value of their names. On the other hand, no individual should be greater than the organisation; and, unless caution is used, there is the danger of the officers' importance overshadowing that of the club. This has occurred in many instances and the clubs have failed. When the individual employs the club as a means of self-aggrandisement the club's tenure of existence is assured only so long as the individual can use the club to further his own interests.

The personal acquaintance of the members will enable them to judge the prospective officers' qualifications. If they are of the type which places self above all other considerations, the club will make no mistake in electing other men who, though perhaps not so well known locally, will not use the club to advance their own interests.

(To be continued)

Practical Kinematography

HERBERT C. MCKAY

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Chapter VIII—Trick-Work (continued)



WHEN projected, this will show us the actor who is to see the vision. Suddenly, a picture begins to form in the upper right corner of the screen. This takes form; and, as it does so, the details of the background fade until the vision is solid. It will be noticed that the character of the background does not affect this vision in any way whatever. When its purpose is served, the vision fades-out and simultaneously the background fades-in.

The process of fading-out, reversing and fading-in is known as a lap-dissolve and has many uses besides that just mentioned. The action of the dissolve may be graphically illustrated by likening the diminishing light of the fade-out to a square stick which is tapered at one end. The superimposed fade-in is like another stick whose tapered end is superimposed upon the taper of the other. The two tapers compensate and make

a stick of uniform proportions. In like manner, the two fades compensate for each other and give us a film of uniform density except for those portions which were exposed to only one of the fades. Such portions will fade without regard to the rest of the film. So, in our example, the background of the vision-portion was exposed only to the fade-out and the vision was exposed only during the fade-in. Consequently, the background fades-out while the vision fades-in. Actors remain immobile so that their images during these two graduated exposures will exactly coincide. Otherwise we should have two ghost actors instead of one solid one.

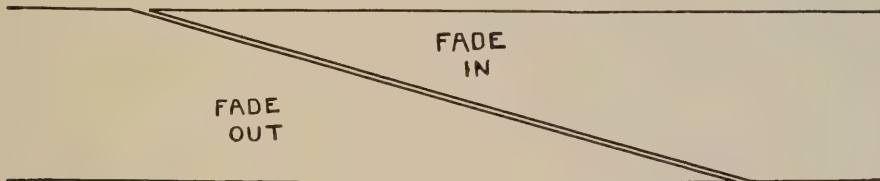
The lap-dissolve is also used to introduce characters in a miraculous manner. For example, suppose that a group were picnicking and a gnome suddenly took shape out of thin air, went through his action and dissolved away into nothing. This is quite simple.

The picnickers are seated about a lunch-cloth. One starts and listens, all turn toward a given point and remain as though listening. This is a plausible excuse to remain immobile or "freezing" as it is called. The camera fades-out. The film is rewound to the beginning of the fade and the gnome takes up his position in the field and the camera fades-in. *Caution!* During all of this time the actors freeze. When the fade-in is three-fourths done, general action is resumed and the action carried on. It will be noted that as there is no lap on the gnome himself that he carries on action throughout both fades, *i.e.*, fade-in and fade-out, to relieve the frozen aspect of the others. When the gnome's action is complete, the camera fades-out, all other actors freeze, the camera is rewound,

out, the film rewound and faded-in upon the boyhood-scene. In this case, as there is a total change of scene, no freezing is required.

The lap is also used, although not often, in the above manner to connect the simultaneous occurrence of separated action. Thus the girl in prison sits hopeless, but the lap-dissolve shows us her lover working for her release; then a second lap dissolve takes us back to the girl.

The introduction of a ghost whose nature cannot be mistaken is often demanded. This is possibly the most simple bit of trickery known. In this work the scene is photographed without the ghost. No masks or other manipulation is used. The scene is straight photography. Then the ghost-actor is photographed upon this same film against a black background. The



the gnome leaves the set, the fade-in is made and action resumed.

At the first fade-out, the gnome's position was vacant so the background fades-out, in the lap upon this the gnome fades-in. At first, he is a barely perceptible image while the background is heavy, as he grows stronger the background behind him grows light because of the single fade so the effect is that the gnome gathers substance. The fade-away is just the reverse.

The lap-dissolve is also widely used in miraculous substitutions. Suppose that a statue is to be brought to life. The statue is photographed and faded-out. Its position is marked, it is removed, the actress to be substituted is placed in the same position, the film rewound and a fade-in made. The effect is that of the statue losing definition, the features become vague and liquid and flow into living semblance, gather definition and a living woman stands where before was a statue of stone. Other such substitutions are made in like manner.

The lap-dissolve is also used in visions. A man dreams of boyhood. Instead of the masked portion of the frame, the whole screen, shifts and changes, and without darkening, the scene from boyhood takes place and is shown. In this work, the scene of the dreamer is faded-

effect is better if the ghost fades-in or out. When projected the ghost-figure appears, takes up action and disappears, but at all times his figure is transparent. This is because the background was not blocked out by masking.

At times, trickery is used for other purposes than to produce supernatural effects. One great point is economy. Glasswork has undoubtedly saved producers millions of dollars, yet I doubt if it has ever been detected by any except professional people. Glasswork is the name given to that particular bit of trickery in which a large portion of the set is not actually constructed, but is painted upon a large plate of glass.

A sheet of fine glass is set between standards at the proper height. This is set just in front of the camera-position. The set in use has been built up only as high as is necessary for action. All spires, and towers upon which no action takes place are built. Then an artist paints these upper works upon the glass sheet in a manner to exactly correspond with the actual set. When this is complete the camera is set up behind the glass and accurately adjusted so that the painting and the set exactly match. Then the scene is photographed in the usual way. When projected the towers will appear to be a part of the actual set. The battlements

towering in the background above the castle in Robin Hood were a fine example of glasswork. This is often used for the sake of economy.

A similar device is the miniature. This may be a city, a train wreck, a flood or what-not. Its size will vary from a few inches to several feet but it will be an exact copy of the real scene on a small scale. Many trainwrecks are miniature works, as are floods, earthquakes and so forth. The Japanese earthquake films which appeared in our theaters a few days following the Japanese catastrophe were fine examples of miniature work.

The introduction of figures into the miniature requires the most involved multiple exposure, so that a psychological trick is resorted to. Instead of this next to impossible trickery, close-up flashes are cut into the miniature-scene; and, as a result, the audience will go home and swear that figures were in the flood or wreck, so that it could not have been a miniature. This trick so apparent to the observant student, is unknown to thousands of fans who have been fooled by it repeatedly. For sheer impudence it beats the three shell man.

These miniatures are marvelous works of art. Regardless of expense and time, the details in so far as they may be visible upon the screen are exact duplicates of the original. They are made by skilled artists and I know of no more interesting thing to be seen about a studio than miniature work.

Trickery which requires no finesse and which is effective is done by stopping the camera, inserting an object or actor and taking up the filming again. In this manner, actors or objects will suddenly appear or disappear as the case may be. This is a useful comedy effect, as an actor in danger merely disappears, to reappear in a different portion of the screen as the action may demand. This was a device used in old slapstick comedy; but it was too crude to stand the test of everyday use, so that it is not often seen now.

Among the older effects were those obtained by reversing the camera; but so many difficulties were encountered that this practice has been largely abandoned except for the supernatural effects. At one time it was largely used in straight production.

We are all familiar with the old thriller, in which the heroine was bound and laid upon the railway. Then, just as the engine came thundering down upon her, the hero ran out to the cowcatcher and raised her in his arms as the engine came to a stop. This scene was a sure-fire thriller and was worked to death. The audiences of that day were so innocent and movies so new that the obvious evidences of

trickery passed unnoticed. The deathknell of this form of thriller was sounded when some observant fan noticed that *the smoke of the engine was flowing into the smokestack instead of from it!*

The effect was produced in this manner. The heroine was trussed up with ropes and placed in the arms of the hero who stood upon the cowcatcher. The cameraman began cranking *backward*, the engine crew ran backward and climbed into the cab, the engine started backward, the hero laid the girl upon the tracks and the engine backed away while the hero backed into the cab. Very simple is it not? But the smoke could not be reversed, hence the ultimate discovery.

One beautiful application of this work was made in an Arabian Nights story. With reversed camera, smoke was shown pouring from a bottle, then by double exposure the face of some genie was made in the smoke. This was coupled to a straight film, made likewise. The effect was that of smoke pouring from a bottle, the genie head appeared; then, at command, the smoke re-entered the bottle.

A comedy-effect is obtained by having a drunken man drop a flask while being photographed in reverse. In projection the man will stare at fragments of the bottle upon the ground. The liquor will run to the fragments, they will reassemble and the restored bottle will fly through the air into the waiting hands of the actor. This has been used repeatedly in variations; but is yet a sure-fire laugh-producer.

It is understood that trick-work has its place in studio-work; but you may wonder what place it has in commercial cinematography. In the first place, most of the good commercial men will eventually find their way to the studio; but also, a good bit of trickery will add immensely to any commercial film. It may be used to demonstrate hidden points of machinery, it may be used to get a laugh which is a great point in advertising-films. Get the audience to laugh with you and they are yours. Trickery is also used to attract attention through sheer novelty and for carrying home a slogan. If you are awake to the possibilities of your profession you will find that a bit of trickery is adaptable to about eighty per cent. of your films. In fact, is this not true of many branches of still photography? Are there not many amateur and professional photographers who resort to little "tricks of the trade" to gain a cloud, subdue a highlight or lighten a shadow?

I have not discussed either stop-motion or slow-motion, for their importance is such that these subjects demand a separate chapter.

(To be continued)

Framing Photographs

CHARLES A. HARRIS



FINE picture is never finished until it is framed. If one is privileged to inspect the work-rooms where frames are made, an idea may be had of the means employed in turning out perfected, machine-made frames. For the purposes of the home-worker, however, such an equipment is hardly feasible or necessary and yet, something can be done which should appeal to the camerist in search of new worlds. When so engaged some attention will necessarily

working down the edges which had first been beveled. The wood used for the intermediate frame in the center, a 10 x 12, and one of the 8 x 10 was Spanish cedar, the kind used to make mothproof chests. It is a handsome wood with shades of red and yellow and streaks of white. Knots are also a characteristic. The others were made of oak, the 8 x 10 being about $\frac{3}{4}$ of an inch wide but could be a little narrower if desired. Occasionally, a little strip of the same material attached in the form of a beading adds



FIGURE 1 FRAMING PHOTOGRAPHS

CHARLES A. HARRIS

be given to accepted rules for mounting and framing and this will be helpful. There is always an interest associated with handicraft when one is at liberty to exercise skill and taste; and some find, also, a certain æsthetic pleasure in wood-working of this nature.

A brief explanation of the frames illustrated will serve to indicate a general plan. The framed portrait in the center is $6\frac{1}{2} \times 8\frac{1}{2}$ inches and the oak-frame, a scant half-inch in width. The largest frame is $1\frac{1}{4}$ -inches wide and accommodates a 14 x 17 glass. This was made of Philippine mahogany, a coarse but straight grained wood, reddish in color. Although they do not show very plainly in the photograph, neat edges, with an inward curve, were formed by wrapping a pencil with sandpaper and so

to the effectiveness. This can be rounded or curved in the manner explained. The right-angle cut or rebate on the back of the frame to hold the glass, print and backing can be cut with a chisel. Two or three of the sample frames have been so made but I have found it somewhat easier and quite as satisfactory to prepare the material for the frame in two strips. One of these is made about $\frac{3}{16}$ of an inch less in width and is bradded to the back flush with the outside edges, so forming the required rebate.

It is now in order to cut and unite the corners. Some may be familiar with the form of mitre-box long in use before the dawn of the modern mitring machines. The diagram will show how a simple and efficient mitre-box is made. Before joining the three boards into a U-shaped trough

a perfect square is ruled on the bottom one that corresponds in dimensions with the width of this board. Perhaps more exactly two sides of the square are so drawn. When the two side pieces have been nailed on, vertical lines are drawn from the four corners of the penciled square by using a steel-square. Next we saw down carefully through these vertical lines, at an angle, of course, and the box is ready for use. It is more necessary to be exact when mitring four corners to be united into a frame than in the case of a single corner because any inaccuracy is four times multiplied. Still very satisfactory results may be had in the use of such a box. Measurements should be marked on the inside

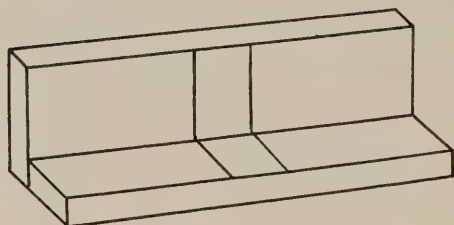
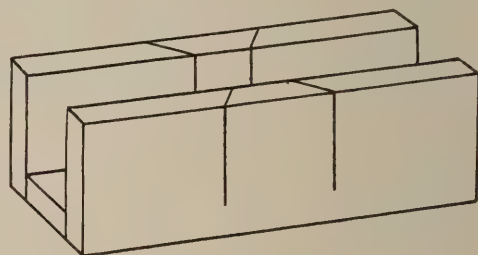


FIGURE 2 MITRE BOX

Paper-supply houses also carry this board in different weights. For small or narrow frames the backing is best fastened in the frame with pins instead of brads, these being less likely to damage the thin wood. A finishing touch is to paste black paper over the back to keep out dust and moisture.

As to the finishing operations the hard woods and those of natural beauty require just a single coat of good, clear varnish to keep them looking fresh. A dull or satin finish, generally to be preferred, is explained in the directions accompanying the varnish. If the high gloss of varnish is not desired, another way is to dilute the varnish with turpentine and, when applied,



CHARLES A. HARRIS

edges; and, if the rebate for the glass is $\frac{3}{16}$ of an inch, then each length is cut double this amount or $\frac{3}{4}$ of an inch less in length than the size of glass to be accommodated. Make certain that opposite sides of the frame are exactly the same length.

There is involved some little knack in connection with joining the corners neatly. For the sort of frames we have under consideration about the best way is to clamp one side of the frame in a vise and hold the second piece in place while driving the nail. To avoid marring the wood, waste strips can be placed in the vise on each side. Two nails for each corner are driven in opposite directions and to avoid conflict they should be started a little off center. It is an advantage, especially with hard wood, to first make a hole with an awl through one side of the corner where the nail starts. This ensures that the latter will be driven effectively in the right direction. The corners should, of course, be glued as well as nailed.

Except for very large frames a satisfactory backing is the heavy cardboard from boxes which have been used for shipping-purposes.

this thinned varnish will usually sink into the wood instead of forming a coat on the surface. When dry, a slight sheen is then produced by rubbing lightly with a rough cloth. For soft woods or when the natural grain is not to be preserved there are excellent varnish stains and dyes on the market enabling one to produce almost any color-effect desired. Generally it is best to try these colors on a separate piece of the same wood before decorating the frame because the effect depends upon the nature of the wood.

In such a manner one collects what might be called trophies more valued by the owner perhaps than the ones made at the shop. The tendency to be avoided in this home-work, judging from experience, is towards over-elaboration. What is wanted is simplicity of design and quiet beauty that harmonises with and contributes to the subject framed but does not strive for first place. The principal reason for the frame and glass is protection for the print; but when properly handled it does serve to give a sense of completeness.

The question of framing pictorial photographs

close-up or framing after they are mounted and so introducing a mat seems to some extent a matter of personal choice or perhaps a saving in first cost. One of our representative supply dealers frames them all close up for the window-display. The same pictures mounted, but unframed, also appear occasionally. Any way I'll leave the subject open. In "Photography

and Fine Art" by Henry Turner Bailey, a chapter is devoted to mounting and framing, a reference to which will greatly assist the reader, particularly with reference to mounting prints.

Our purpose will be accomplished if the subject of frame-making has been presented in a manner most likely to compensate the camerist in pleasure and profit.

The Ill-treatment of Lenses

A. LOCKETT



WHEN one considers the elaborate trouble taken to ensure smoothness of surface and high polish in photographic lenses, it is not a little surprising and regrettable to note the careless and haphazard treatment so frequently meted out to them. On a seaside quay, for instance, with sandy dust blowing strongly in and visibly whitening the clothes of bystanders, it is quite common to see both the practical worker and the enthusiastic amateur exposing on harbor and ships with their lenses left bare and unprotected for minutes at a time. A gritty deposit is inevitable and presently the lens needs wiping, which is done in the open with an almost equally sandy handkerchief, the effect being to abrade and dull the front surface. It is a pity that photographers cannot inspect that surface under a microscope, before and after the sanding and rubbing treatment. With a new or almost new lens the difference is instructive.

There is a simple and inexpensive safeguard against abrasion by grit, that seems to have escaped attention. It consists merely of a cap to fit on the lens, having a circular opening behind which is fixed a disc of glass—a similar arrangement, in fact, to the cap of an enlarger, save that the glass is colorless. The glass should be of good quality and free of defects. Two optically plane and parallel surfaces are theoretically desirable, though in an emergency this requirement may be waived without any very serious detriment. Another advantage of a plain glass-cap is that one can use it to make a fairly accurate guess at focusing in a moist and steamy atmosphere. Then, when the plateholder is inserted and the slide drawn, the cap can be removed sharply and an instantaneous exposure given before the lens itself has time to steam badly. When the glass gets scratched and dimmed with rough usage it can be replaced by a fresh

one. The trifling trouble is well repaid by the improved condition of the lens. It is not, of course, suggested that the glass should be used except in rough or bad weather. A before-lens orthochromatic screen obviously serves the same protective purpose, but cannot be employed in all conditions of light or with all plates.

On no account should the inside of a camera be dusted with the lens in position, for that is a very efficient way of scratching the rear surface. Dusting, at best, is an evil invention, happily being fast superseded in the home by the vacuum cleaner. The photographic novice is promptly identifiable by the superfluous care with which he dusts and "polishes", or in reality de-polishes, both camera and lens inside and out, in every moment of spare time. Dust should be blown or drawn away, not wiped off, and never given a chance to collect beyond the stage amenable to such gentle treatment.

Some photographers have curiously casual ways of storing lenses. It is not so very unusual to see valuable portrait-lenses stood upright on the floor in a damp, dusty corner of the studio, without even a cap on and cheek by jowl with some heavy iron article, such as an arc lamp stand or a retired head-rest. Instances have even been known of spare lenses kept in the darkroom, within reach of splashing chemicals and deleterious vapors. And strangely enough, such a photographer is often extremely fastidious about the polish and condition of his camera and plateholders, wraps them in velvet when not in use, and groans dismally at the first sign of a tiny dent or crack.

Many people seem to fancy that glass does not deteriorate, and that water and a rag will remove any kind of deposit. Yet the daily observation of household glass-utensils ought to teach the fallacy of this idea. Comparison of new tumblers, wine-glasses, mirrors, windows, etc., with those that have been some time in use will clearly

demonstrate the dulling, abrasion, rubbing down of formerly sharp edges, and often distinct change of color that takes place. Spots of obscure origin are also met with, eaten by some means into the surface, and irremovable. Now, generally speaking, optical glass is softer and more readily injured than the cruder kinds used for domestic purposes, requiring in consequence far greater care and attention.

Lenses call for almost as equable a temperature as any convalescent, neither too cold nor too hot; but the sun-cure, now widely advised as Nature's universal remedy, is poison to the photographic objective. Except when focusing or exposing, it needs to be kept dark, like a dangerous secret, excessive light tending to discoloration, especially with some of the glasses used in modern anastigmats. Photographers in tropical and semitropical climates are tolerably well aware of this, but the warning is almost as applicable anywhere in bright weather. It is yet another argument for the consistent use of a hood in outdoor-work. Certain kinds of glass are specially affected by ultra-violet rays, which suggests the undesirability of leaving lenses uncovered in the vicinity of arc and mercury-vapor lamps.

Heavy lenses may easily be injured by unsteady and inadequate support, as when using them on a fragile, or at least insufficiently strong camera-front, putting them on thin or ill-fitting lens-boards, or even fixing the flange with unsuitably tiny screws, or those that are cheaply made and have no proper grip. As a result, the flange or the tube may be strained, or the lens may possibly part company unexpectedly with the camera, which means a certainly unbeneficial and very likely fatal crash. It is seldom realised how great is the pull of a heavy lens away from the camera, due to inertia and gravity, when the studio-stand is suddenly drawn back, to get further from the sitter. If the screws are found to be loose, so that they continue to move around when driven in flush, the

flange should be shifted without delay by turning it slightly, stopping up the old holes with a mixture of fine sawdust and glue, or with plastic wood, and using carefully selected new brass-screws. A blackened cardboard lens-board, that favorite means for the temporary adaptation of a lens to an unaccustomed camera, should never be risked with any but small, light objectives. Heavy lenses, in fact, undoubtedly ought to have some sort of strut, or a cantilever bracket, to uphold the tube and take most of the strain off the lens-board and flange.

Another form of rough usage still occasionally met with, though getting rarer in these days of studied interchangeability, is a misguided endeavor to force a lens into a flange that it does not really fit, thereby perhaps doing much damage to the screw-threads of either or both. When the obstruction is evidently nothing but a slight tightness or a failure to start properly, a mere trace of powdered blacklead may help; but directly it is seen that actual discrepancy exists the attempt should at once be abandoned.

Outdoor-workers are fond of carrying spare lenses in their pockets to guard against loss. This is a sure method of applying all kinds of undesirable friction and strain, besides distributing dust and fluff on a liberal scale, sometimes even inside the lens, though how it gets there may, like the fly in amber, give rise to wonder and speculation. Lenses should never be carried save in bags, cases or boxes, or within the camera. A well-known worker used at one time to have a couple of pockets in his hat, capable of accommodating two or three lenses of modest size. This is by no means a bad idea, though not without several evident drawbacks. A better plan is to utilise a small knapsack or satchel, fitted with padded compartments. Surely the photographer can devote as much attention to the storage and carriage of his most important implements as the sports devotee does to his yacht, motor-car, golf clubs, guns or tennis-rackets! *The British Journal.*





SUMMER-HAVEN

L. J. CREEGAN

HONORABLE MENTION—MISCELLANEOUS COMPETITION

Photography as a Hobby

WARWICK BARSE MILLER



WONDER if many people in the grand American rush realise what a unique hobby photography offers in its dual aspect of pure recreation combined with intellectual study.

It appears, along the comfortable groove of superficial thought, that all hobbies possess these two ideal advantages; but such is not the case. Golf, now such a popular American hobby, is purely recreative; but it can hardly be said that there is any intellectual characteristic to it. Tennis, horseback riding, shooting, hunting, fishing are the same as golf in this respect. Likewise the hobby of reading is intellectual study; but there is certainly no pure recreation attached to it. So with card-games, stamp-collecting, conversation, art-study. But in photography we can, on the one hand, wander through rich green fields, or gaze at the snow-covered mountains and wintry streets, or travel to enchanting countries, and in each of these pastimes photograph those scenes which happen to please our idle fancy. And if we are intuitively artistic these scenes which please our idle fancy

will have worthy beauty; and, if we are not artistic by nature, they will have instead of beauty some interesting significance, otherwise we would not be drawn toward photography. Then, on the other hand, we may experiment with the hidden marvels of photographic chemistry which undoubtedly exist in abundance and are only waiting to be discovered, or we may research on the fascinating development of photography as far back as the sixteenth century—the main principle going back as far as the Greeks—or we may compose scenes according to the divine dictates of our artistic talent. Hence, on the intellectual side of our hobby, we have science, literature, and art from which to choose for our enjoyment.

These divisions naturally bring us to the unusually broad field of interests that are involved in the practice of this hobby and which makes it so engrossing to us when we once become interested. We can scarcely work long with lenses, angles of vision, lighting-effects, and colors without desiring to know something of optics, physics, chromatics, and mathematics;

we can scarcely compose a landscape or photograph an individual without developing our sense of art and human nature; and every once in a while in our work we come in contact with speculative science when such questions occur to us as, why is red a very mild color to a plate and a very violent one to the human eye and blue a very violent one to a plate and not so violent to the human eye or, why can't there be some chemical that light will effect positively so that there will not have to be negatives? Another Elysian field, thick with the flowers of learning that photography throws open for us to roam through, is in the subjects we photograph. Here we learn a great deal more about life, and the things that make it up, than people who travel do; for our power of observation being constantly called into play is developed to a high degree. Whatever we photograph we unconsciously learn something about its color, habits, growth, peculiarities, nature, significance, and relation to other things. Thus, in photographing a plant we come to know just where and in what conditions it grows, the time of year its flourishes, its color, texture, size, life, and what botanists use it for. In making landscapes we observe the effects of weather-conditions on the sky, the different kinds of clouds, how a bit of scenery stands out from the surrounding landscape by being distinctly artistic and beautiful with its mass of shadows or its placement of trees or hills. In portraiture, after a little while, we cannot help learning what people's facial expressions mean, which leads us to a knowledge of character, psychology, and human nature.

We are all most certainly acquainted with the way the sciences and arts have become dependent on photography for their advancement in the last score of years. Hence, through this hobby we may reach astronomy, micrography, biology, botany, art, nature, criminology, the press, and, of course, the kinema. In point of fact, almost any institution may be reached through photography, since it seems to be applicable to anything in the universe. Sir Oliver Lodge and the little English girl have even tried it on spiritualism.

Such are the innumerable branches of interest which make the hobby of photography such a fascinatingly enticing diversion; an entrancing labyrinth where we may wander through hundreds of endless, winding passages until we find one which just suits our predilections.

And yet, this ideal virtue of photography as a hobby is apt to become a vice if we do not handle it the right way. We are very apt to become suddenly so interested that we are swept away with enthusiasm to investigate all the interests at once, with the inevitable result that we

become tangled in a world of prolixities and the mind becomes distracted, so that we do many things fairly well and nothing very well. Then it ceases to be a hobby and becomes a bore. We do this not only with the greater interests, which I have just mentioned, but with the smaller interests in first beginning the hobby. Thus, we want to make bromoils, enlargements, retouch, make fine portraits, and try all the varieties of paper, films, and developers before we have mastered the simple process of developing and printing. This is certainly very complimentary to the intelligence of those among us who want to do it; but we must remember that simplicity and order are essential to every trend of thought; and, if we try to find out too rapidly about things, we only end in failure and disappointment. This passion of seeking at once every interest in the hobby seizes only those persons of the mentally high-tensioned and intellectually curious temperament; those of the simple, steady temperament will go slower.

We may take the hobby in either of two ways: we may be interested in it generally, or we may specialise. Some of us find pleasure in simply making our pictures, and developing and printing and enlarging them in a mild way we have become used to, but never going very deeply into any part. Others of us take a deeper interest by gradually studying all methods and then selecting one which particularly attracts us, work until we become expert at it. This last way is the most popular among us I believe. It is to be observed that in both cases we avoid becoming confused. In the first case, our object is to produce good pictures and not to discover all kinds of ways to produce them. In specialising we may be drawn into the chemistry and hunt for new developers and watch their effects, we may be an artist and make beautiful landscapes on bromoils, we may be a scientist and photograph microscopic objects, or we may be unusually expert at enlarging, inventing photographic appliances, or writing about the hobby we enjoy. But whatever we take up in this hobby we know that neither time, weather, nor place can interfere, for its departments are adapted to indoors and outdoors, night and day, and now they have a whole developing-and-printing arrangement in a suitcase so that we can work on any part of the earth we happen to be.

[We believe that this article refreshes our minds as to the value of photography as a hobby and points out some opportunities which we may have overlooked. Then, too, we must remember that there are many new readers who need such good suggestions. EDITOR]



Official Photograph, U.S. Army Air Service

Courtesy National Geographic Magazine



TWIN LAKE, JACKSON HOLE, WYOMING
CAPTAIN A. W. STEVENS

Concerning Definition

J. RONSON HALL



ARGUMENTS concerning the relative depth of focus, depth of definition, and depth of field of different lenses, are not uncommon among amateur and professional photographers; and, although these things can be stated definitely in optical formulæ, conflicting opinions can always be found. The difference between the definition of short and

Let BL be the 3-inch lens converging similar rays to meet at C. It is plain that the angles ADL and BCL are equal, therefore the same linear movement at the focal plane will be possible in each case, without exceeding the distance which gives the 1/96-inch standard. In other words, each lens has the same depth of field. But that is not all. A racking in or out of 1/32-inch, or a total movement of 1/16-inch

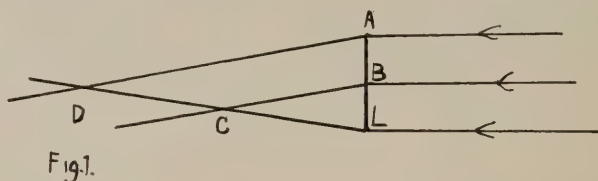


FIGURE 1

J. RONSON HALL

long-focus lenses is the principal stumbling-block. This is something which can be clearly explained with diagrams; but first, can we distinguish between the ambiguous terms, depth of focus, depth of field, and depth of definition?

Depth of definition and depth of focus are usually taken to mean the number of planes in front of the lens, which can be imaged sharply at one and the same time. Depth of field is supposed to mean the extent of variation possible in the focal length, by racking in and out

is possible in each case. 1/16-inch is a greater allowance with the 3-inch lens as Figure 2 will show. In Figure 2 each lens is converging light from its "life-size" distance. With AL this is 12 inches away. With BL it is 6 inches away. The light will be converged to meet at D and C respectively. Still the angles ADL and BCL are equal and each lens has the same depth of field. However, in each case this is greater than when working at infinity, as the angles are more acute. The F/value is actually reduced. The

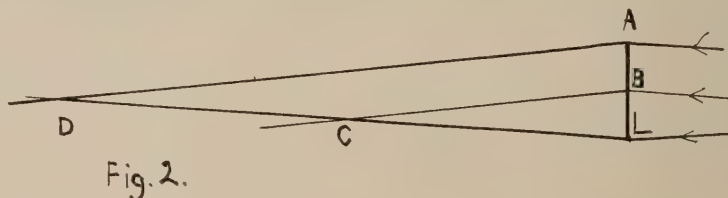


FIGURE 2

J. RONSON HALL

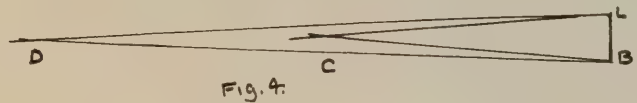
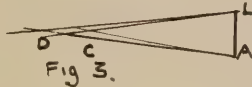
going outside some given standard of sharpness. Whether these views are universal or not, they will serve for my present purpose, although it is a pity that more definite terms are not in general use and agreement.

Here is an easy theoretical comparison between two lenses of 6-inches and 3-inches focal length, both working at F/3. Let us take as the desired standard of sharpness, the very convenient one of 1/96-inch to the point. In Figure 1 let AL be the 6-inch lens. Light from a distant source will be converged to meet at D, six inches away.

allowance of movement of the focal-plane by racking is now 1/16-inch either way or 1/8-inch altogether.

Now consider Figures 1 and 2 together. AL has covered within the prescribed limit of sharpness, from infinity to a plane 12 inches off, with a racking-movement of 6 inches. BL has covered from infinity to a plane 6 inches off, with a racking-movement of only 3 inches. (BL has covered a greater number of planes with half the linear movement.) Taking the average free movement as 3/32-inches in each case, the focal

length of AL has had to be moved along 64 times its depth of field. BL has had to be moved along only 32 times. Therefore one might approximately say that BL has twice the depth of focus that AL has, both working at the same F/aperture.



FIGURES 3 AND 4

J. RONSON HALL

Figures 3 and 4 deal with another aspect of the question. Here are two lenses of the same linear diameter but not of the same F/ value. LA is a 3-inch lens of 1-inch aperture (F/3). LB is a 6-inch lens of 1-inch aperture (F/6). In Figure 3 the angle LCA represents the convergence of light from infinity. LDA is the cone from a plane 12 inches off. Figure 4 shows the same situations with a 6-inch lens. The field at C, Figure 3, is 1/16-inch deep altogether. At D it is 1/12-inch. Approximate average, 1/14-inch. But this happens to be 1/14 of the whole movement necessary to cover from in-

finitly to the plane 12 inches away. In Figure 4 there is 1/8-inch depth of field at C and 1/4-inch at D, average 3/16-inch or 1/32 of the 6 inches shift necessary to cover the same distance. In short, the 3-inch lens at 1-inch aperture, has twice the depth of focus or depth of definition

possessed by the 6-inch lens of 1-inch aperture, although the latter has the greater depth of field. An actual example of this is the Dallmeyer Pentac F/2.9, which with a linear aperture of roughly 1-inch has depth of focus equivalent to that of a 6-inch lens at F/11.5.

In conclusion, this is not written purely in favor of short-focus lenses. The writer prefers long focus at big aperture with sharpness, not too acute, in one plane only, wherever the nature of his work will permit. The above is merely an attempt to simplify a few facts and to offer suggestions that may be of service.

Pictorial Photography from Airplanes

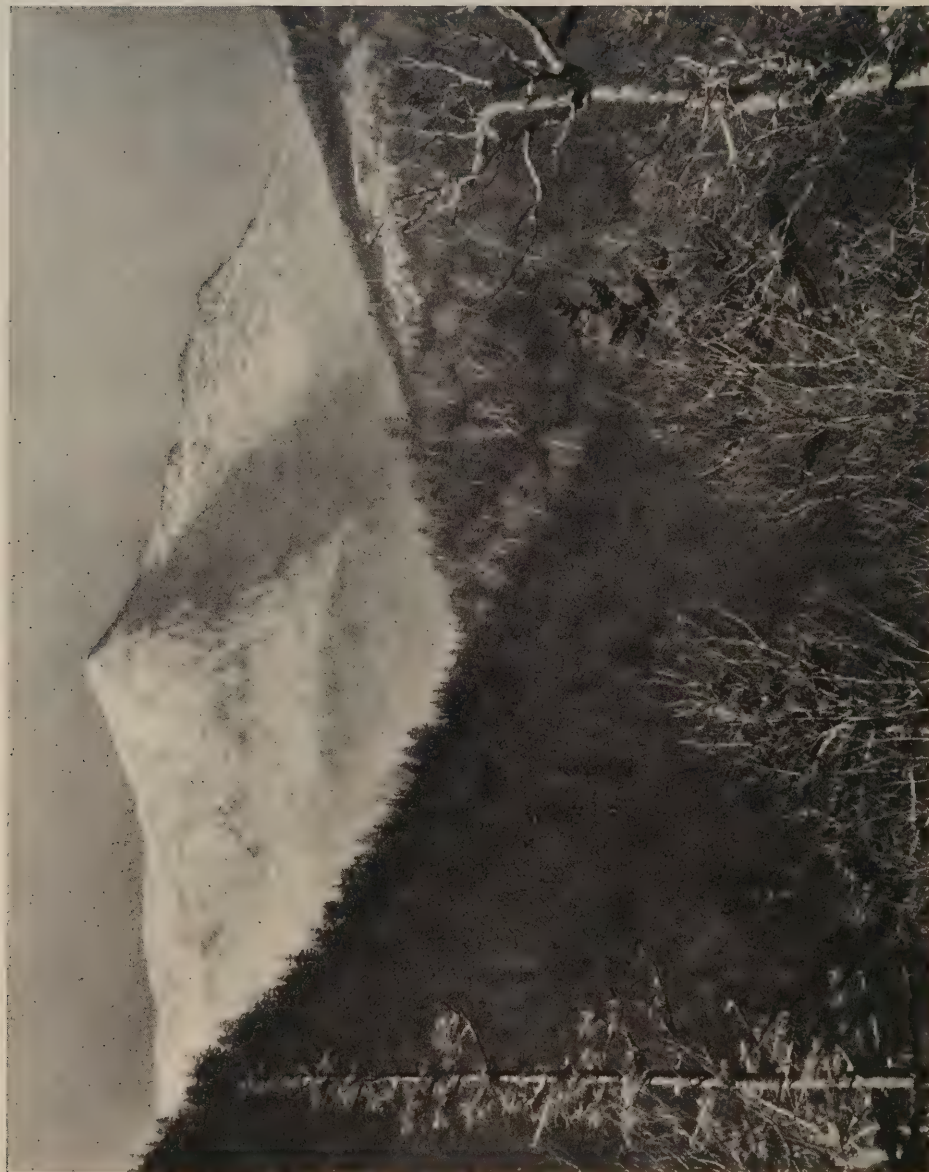
A. H. BEARDSLEY



MY recent experiences while on active military duty at Chanute Field, Rantoul, Ill., have led me to feel very sure that within the next ten years pictorial photographers will resort to aerial photography for some of their subject-material. It was my privilege to make several flights and to cover considerable territory while being instructed in the use of the Fairchild K-3 and other aerial cameras for oblique and vertical photographs. I made pictures at altitudes from a few hundred feet to ten thousand feet; and, by practical experience with aerial cameras, I am led to see the possibilities in the future. To be sure, the splendid work of Captain A. W. Stevens, U. S. Air Service, is evidence enough that beautiful pictorial work may be done; but

I have reference more especially to the average civilian pictorialist who will grasp the opportunities which now lie dormant in aerial photography.

In an early issue, I shall try to tell of my first introduction to flying and aerial photography. It will be just a simple account of my experiences, sensations and photographic efforts in the air. Let me say that if all my readers could have witnessed one cloud-panorama which I saw at an altitude of about six thousand feet, they would share my confidence in the future of pictorial photography from airplanes. Perhaps, after reading my report, many readers will lose their possible fear of the airplane and the physical effects of making pictures at one hundred miles an hour.



MOUNT ADAMS, N.H.

HONORABLE MENTION—MISCELLANEOUS COMPETITION

WINSTON H. POTE



EDITORIAL



Pictureless Homes

THE present change in the appreciation of art, which has already seriously affected the sale of good pictures, has created a situation that would seem to demand the most thoughtful consideration of every person who is interested in fine pictures—either in selling or producing them. This brings us to the kindred subject of pictureless homes, which means that the new house or the new apartment is designed to be without pictures. The wall of every room of these modern homes—parlor, living-room, reception-hall and dining-room is to be absolutely bare! Instead of being adorned with paintings or enlarged photographs, or even decorated in the manner of the ancient Pompeians, the walls of the ultra-modern house or apartment are given a new surface—tinted, stippled, mottled or stuccoed, according to the fancy of the architect, interior decorator, or whoever is responsible for the innovation. Sometimes, too, the wainscoting is carried quite high, and there is not sufficient space above it in which to hang pictures. The contents of the apartment would need to be exceedingly attractive and in good taste, to reconcile the occupants and visiting friends to the absence of pictures. But do fine draperies, furniture and rugs compensate for plain, unadorned walls? Do these large, plain surfaces satisfactorily take the place of treasured mementos and inspiring themes in the form of attractive pictures? It must leave a void in the hearts and minds of these people that is difficult to fill. Then, too, if they are persons of education and refinement, they must miss objects that mark one of their accomplishments, namely, the ability to create beautiful pictures, paintings or pictorial photographs, of the kind that engages the attention of visitors who, themselves, are picture-lovers and creative artists, and able to appreciate and enjoy the artistic efforts of others. And yet many persons who own fine pictures will not hesitate to admit that their cherished works of art attract little or no attention from the average visitor. Instead of admiring genuinely artistic pictures, and discussing their merits and their history, preference is readily given to a game of cards, a little music, or to idle and profitless conversation. Notwithstanding, the owner finds them a constant source of joy and satisfaction.

On the other hand—and “pity ’tis ’tis true”—there are persons whose taste for pictures and other art-objects is crude or undeveloped. When they choose to live in an abode designed to eliminate pictures, they ought to be thankful that their bare walls are likely to give less offense to the discriminating visitor than their absent, wretched pictures—reminders of their ignorance in matters of art. Nevertheless, in all kindness let it be said that the impecunious man—he who has had no opportunity to cultivate his mind along artistic lines, is to be commended for having in his home pictures that appeal to him, even if they do not reach a high artistic standard. Shakespeare is right when he says that

“The man that hath no music in himself,
Nor is not moved with concord of sweet sounds,
Is fit for treasons, stratagems, and spoils.”

And when the great poet said this, he must have meant to include art or love of pictures.

As the number of pictureless homes is on the increase—by reason of the prevailing fad of forbidding walls—it behooves the workers in pictorial photography to use their influence to prevent the spread of this unrighteous and insidious innovation. There should be protests in the form of open letters to the newspapers, articles in popular magazines, and public lectures at camera-clubs by prominent photographers, professional and amateur. It will not do to permit the unfeeling architect or selfish decorator to curtail the people’s enjoyment of art in the home, or the production of artistic pictures, whether paintings or photographs.

Here, then, is an unusual opportunity for the painter and the artistic photographer to meet on common ground, and to co-operate in arresting a movement that is proving a serious detriment to both. The painter of really good pictures is already feeling the results of the picture-dealer’s preference for meretricious, ultra-modern daubs. He is anxious for the future of his bread-winning activity, and he may well be.



When Goethe said, “Die Kunst geht nach Brod,” or Art goes abegging, he referred to painting and sculpture. He lived in a period when many a true artist found it difficult to make both ends meet. Let us try to avert similar times.



ADVANCED COMPETITION



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Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
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Second Prize: Value \$5.00.
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Prizes may be chosen by the winners, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, suitably engraved.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

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Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.
2. Not more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered into competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

3. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. Prints may be mounted or unmounted.

4. Each print must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer, and printing-process. Enclose return-postage. Data-blanks sent at request.

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he shall have received official recognition.

6. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces is sent with data. Criticism at request.

7. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

8. Competitors who have won three first prizes within a twelve-month become ineligible to compete for prizes in this competition for two years thereafter.

Awards—Advanced Competition

Subject—Miscellaneous

Closed June 30, 1925

First Prize: J. Herbert Saunders

Second Prize: Dorothy Jarvis

Third Prize: Walter Rutherford

Honorable Mention: A. R. Brown; E. H. Brown; K. A. Butka; A. Caskey; Miss G. Finnie; Allen Fraser; S. Beng Guatt; Joseph Hamersky; Nicholas Ház; S. Hirano; Hiroma Kira; Edgar L. Kline; William Ludlum; D. O. Macko; L. McKissick; M. J. Osaki; Melvin Parrish; Michael J. Pecora; Chas. T. Ramsden; Henry T. Sill; Burton Slade, Jr.; Edgar S. Smith; Kenneth D. Smith; Maurice Smith; Vincent W. Stelcik; Ralph R. Weddell; Alfred K. H. Wong; Wm. O. Yates.



Subjects for Competition—1925

"My Home." Closes January 31.
"Miscellaneous." Closes February 28.
"Indoor-Genres." Closes March 31.
"Table-Top Photography." Closes April 30.
"Artificial Light Photographs." Closes May 31.
"Miscellaneous." Closes June 30.
"Front-Cover Illustrations." Closes July 31.
"Real Sunrise and Sunset Pictures." August 31.
"Wild and Cultivated Trees." Closes September 30.
"Miscellaneous." Closes October 31.
"Lakes, Rivers and Brooks." Closes November 30.
"Interesting People and Places." Closes Dec. 31.

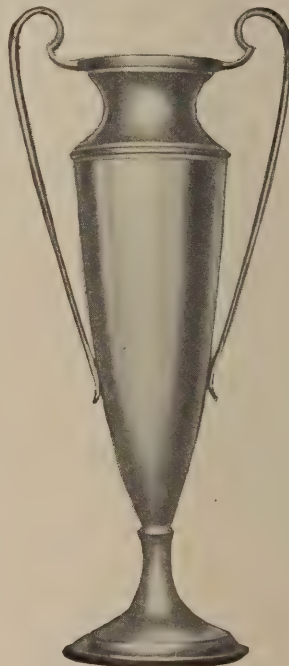


Photo-Era Prize-Cup



AFFECTION

FIRST PRIZE—MISCELLANEOUS COMPETITION

J. HERBERT SAUNDERS



MOTHER AND CHILDREN

DOROTHY JARVIS

SECOND PRIZE—MISCELLANEOUS COMPETITION

Advanced Competition

"AFFECTION", by J. Herbert Saunders, awarded the first prize in the "Miscellaneous" competition, excels by beauty of conception, simplicity of pictorial design, spontaneity of expression and photographic excellence. The emotional feeling is as well simulated here as in similar cases by masters of the brush. The kiss is bestowed in a quiet, girlish manner and the recipient of the honor looks truthfully abashed and speechless. The contrast between the two children, in its quiet restraint, is delightfully expressed. A difference is also shown in the manner of the children's dress—the girl's being of a decorative pattern, and that of the boy a severely simple sort. The matter of more space at the bottom is debatable. As for myself, I would not object if one inch or so were added—accomplished by making a smaller image. This would bring the heads of the little models higher up in the picture-area and enhance the present quality of the composition. The manner of illumination shows the technical experience of the artist which, together with the pleasingly characteristic quality of definition, constitutes his style or

individuality as one of the most successful of English genre-workers.

Data: Made in Leeds, England; July afternoon; diffused sunlight; $3\frac{1}{4} \times 4\frac{1}{4}$ Graflex; $5\frac{1}{2}$ -inch Aldis lens; stop, F/6; $1/20$ second; Primo Film; Metol; enlarged on Kodak Royal Cream Bromide.

In her family-group, "Mother and Children", Dorothy Jarvis has shown the result of natural ability, study and experience. Her growth as an interpretative and executive artist, during the few years that she has taken up photographic portraiture as a profession, has been rapid and firm, so that she now occupies a position in the front rank of women-photographers. Her present portrait-group is engaging by reason of its expression of unity, the skilful control, by lighting, of elements likely to become too assertive as highlights—hands, limbs and dresses—and the pleasing arrangement of the figures, forming a pyramidal composition that is not strained or forced. The feeling of motherly tenderness and affection is also well interpreted.

Made in the studio, Brookline, Mass.; June, 10 A.M.; light from windows; 5×7 Graflex; $11\frac{1}{2}$ -inch Wollensak Verito; stop at F/6; 1 second; Eastman Portrait



THE FOREST FIRE

WALTER RUTHERFORD

THIRD PRIZE—MISCELLANEOUS COMPETITION

Film Super-Speed; Actinol; print, Velours Buff Platinum Mat.

Walter Rutherford, as an aviator, and with his quick, artistic perception, is able to obtain pictures considerably out of the ordinary. Here, he has given us a comprehensive view of a raging forest-fire, such as can be had only from a position above *terra firma*. He adroitly directed his camera—not of the large special type, but a Graflex—so as to include the towns or settlements seemingly in the path of the fire. Having a cream-colored surface, the enlarged photograph possessed a pleasing tone impossible to reproduce here. This tonal quality contributed much to the beauty of the print, and enhanced its pictorial appearance.

Data: Made from a flying boat over the Mistassini River, north of Lac St. Jean, northern Quebec, while on a photographic patrol, in 1921; May, 11 A.M.; bright sunlight; 4 x 5 Auto. R. B. Graflex; 8¼-inch Carl Zeiss Tessar Ic; at F/4.5; instantaneous; W. & W. Panchromatic; pyro-soda; enlarged on Wellington Cream Crayon Bromide Rough; toned.

WILFRED A. FRENCH.

Paintings as Object-Lessons

UNDER the caption, "Photography and Painting", in our August issue, I suggested that the pictorial worker, passing through Boston, visit the summer-exhibition of the Boston Art Club, and see how the modern artist upholds the best traditions of pictorial composition, and also how he falls short in this respect. To be sure, many present-day artists maintain that pictorial composition is not essential to good art, and

that a true work of art should be devoid of clarity in artistic expression and thematic intent. The aim of the painter is to leave the beholder in doubt as to the meaning of a picture, they contend; for it would be degrading if his work should have an obvious storytelling quality. Be that as it may, his pictures are exhibited obviously to be enjoyed by the multitude, which has the right to like them or not—to admire, praise or disapprove. In the above-mentioned collection of paintings, exclusively by members of the Boston Art Club, there are many which appeal to the beholder's sense of beauty. They charm, uplift, exalt. One feels the better for having understood the artist's loving message. The student will at once appreciate the dignity and simplicity of the artist's chosen theme, its delightful interpretation and its technical excellence. The pictures that gave me the most pleasure were, "Mount Monadnock, N.H.", by Woodward, the most poetic interpretation of this well-known peak I remember ever to have seen, and which occupies the place of honor in the exhibition; "Pond and Vista", Hatfield; "Doorway in Sunlight", Graves; "Hillside in Ukraina", Pavlosky; "Winter-Brook", Wilder; "Buttressed Cliffs", Schneider; "Winter-Twilight", Closson; "Maritime Alps", Gendrot; "Street in Winter", Aldrich; "The Catskills", Perera; "Girl with Book", Moore; "Self-Portrait", Comins; "Portrait", Burdick; "Bright Day on the Pacific", Kingsbury; "The Artist", Cosimini, and "Portrait", Hohl.

There are also pictures that offend by a design of strongly divided interest, or one of a distracting character so disconcerting that the eye vainly tries

to find a quiet resting-place. There are flower-pieces, of which the pattern is so bewildering in promiscuous, variegated spots of color as seemingly to warrant the designation, "color-jazz", facetiously applied by a critical visitor. There are other instances where the absence of unity and harmony betray the violation or ignorance of the rules of pictorial composition, and present object-lessons to the art-student of what not to do in painting or in pictorial photography.

WILFRED A. FRENCH.

Calculating Angle of View

I RECENTLY had occasion to calculate some angles of view embraced by some lenses I had for testing, writes Godfrey Wilson in *The British Journal*, and although the tables found in most books of reference, notably the "B. J. Almanac," gave me certain figures they appeared not to be precise enough for my requirements. The orthodox tables ("B. J. A." 1925, pp. 495 and 502) do not appear to be in complete agreement. What slight differences there are, however, are of no particular moment, since the angles given are near enough for all practical purposes.

There may, indeed, be no errors; for I am not a qualified mathematician, and the differences in the results I get by rather primitive summing may be due to wrong methods of calculating. At the same time, I wanted a method which would give me degrees for diagonal, horizontal, and vertical picture-areas, and these angles no ready reference-table gave me.

There is, of course, the diagrammatic or protractor system of finding view-angles, a system so well described and illustrated on page 40 of Lockett's "Camera Lenses", and probably in many other places as well, but even this plan of measuring did not meet my needs, a purely arithmetical method being more to my liking.

Inquiries made in a circle of mathematical friends (mainly non-photographic) interested in optics, have brought to light a method of calculating view-angles, a system which may or may not be new to photographers; at any rate I can find no trace of it, or of anything like it in any works of reference.

At first sight, the system appears to be unduly elaborate, and equivalent to the proverbial use of a steam hammer to crack nuts; but the elaborateness is its strong point, as the simple calculation of fractions the system calls for enables one to calculate for lenses of any foci and plates of any size—diagonal, horizontal, or vertical.

One must of course know the exact focus of a lens before the angle it includes can be ascertained, and assuming the focus is known the rest is fairly easy. The rules are:—

- (1) Double the focus of the lens. Then
- (2) Find the circumference of the circle of this diameter, which may be done by multiplying the double focal length by $3\frac{1}{7}$. Next
- (3) Divide 360 by the number obtained (double focus $\times 3\frac{1}{7}$) and you will get the number of degrees per inch of plate.
- (4) Multiply the number (per inch) by the diagonal, horizontal, or vertical measurement of the plate the lens is used for and you will get the number of degrees included by the lens upon the plate—diagonally, horizontally, or vertically as the case may be.

Example: What are the angles included by a lens of $4\frac{1}{2}$ ins. focus on a $3\frac{1}{2}$ in. by $2\frac{1}{2}$ in. plate, diagonally, horizontally and vertically? The lens focus ($4\frac{1}{2}$) doubled gives us 9, which multiplied by $3\frac{1}{7}$ gives a total of $28\frac{2}{7}$; then $360 \div 28\frac{2}{7} = 128/11$. As stated above this $128/11$ is the angle per inch. The diagonal

of a $3\frac{1}{2}$ in. \times $2\frac{1}{2}$ in. plate (or film picture) is $43/10$ and $43/10 \times 128/11$ tells us that the angle diagonally is $548/11$ deg.; while the horizontal base angle ($3\frac{1}{2} \times 128/11$) is $446/11$, and the vertical ($2\frac{1}{2} \times 128/11$) $319/11$ deg.

The protractor method of measuring also gives the same results; but according to the Woodman tables the result according to my reckoning would be 51 which, I suppose, is the diagonal angle. The table on p. 502 of the "B. J. A." appears to be accurate enough, for according to it a $4\frac{1}{2}$ in. focus lens on a $3\frac{1}{2}$ in. \times $2\frac{1}{2}$ in. plate embraces an angle (horizontally) of 40 deg., but this table makes an allowance for the rebate-mark one usually gets upon plates. The advantage of the newer method I have given, however, is that any lens and picture-area may be calculated.

Pre-Judging the Picture

A DIFFICULTY which faces both industrial and pictorial photographers is the correct gauging of the composition of a photograph before exposing the plate or film. A really accurate idea cannot be got from the reversed image on an ordinary focusing-screen; small finders of any type are not efficient guides for judging the composition; and large direct-vision finders, though offering some advantage, are not perfect because they do not hide the outside view. The reflex is the best medium, but is not the best type of camera for work which needs to be tackled from a high viewpoint, and in industrial photography, at least, the high viewpoint is very often essential.

A handy guide for use with a single focal length is easily made from ticket-board or even thick paper, taking something like the form of the sliding-cover of a matchbox, but having dimensions in proportion to those of the camera, the distance between the open ends corresponding with the focal length. Thus, a camera taking a 4 by 6 plate using a 6-inch lens, would be supplemented by a gadget measuring 3 by 2 by 3. Held to the eye, this would show clearly just what would appear on the plate were the camera to take its position, all extraneous view being cut out.

This little aid can be so made that it will collapse and slip into the pocket, and by carrying it about when not out for photographs, possible views for future attention can be promptly judged. But it has the disadvantage of assisting only one focal length of lens to any one plate-size. To cover an outfit carrying a battery of focal lengths, the gadget would need making in telescopic sections and scaling off, and some might find the job well worth the trouble. When, however, the camera is on the spot, there is a simpler method. It is to remove the lens after brief focusing, reverse the camera by revolving on the tripod, remove the screen, and view the proposed study through the hole in the lens-panel, keeping the eye steady and in the center of the hole. While this may deceive slightly as to the actual margin, it readily admits judgment of the various salient features of the picture and their proportions and relative positions, and the operation will, at times, result in a hasty move to a different standpoint.

With nothing but the usual screen to work by and when the judgment is formed from a weakened and reversed image, results must occasionally at least suffer the after-treatment of trimming down to improve balance and composition. Although this need not affect the one who intends his prints purely for pictorial purposes, or his negatives for enlarging it is a distinct failing when a standard-size contact print is wanted from a standard-size negative.

THERMIT in *The British Journal*.



SUBJECT FOR NEXT COMPETITION ADVANCED WORKERS



THE RUINED ABBEY

WARREN R. LAITY

Advanced Competition—Miscellaneous Closes October 31, 1925

AGAIN we are to have a competition devoted to miscellaneous subjects and again the jury will face a difficult task to decide upon the prize-winners because of the great variety of subject-material. I wonder whether or not my readers have any conception of what it means to have over one hundred prints—composed of marines, landscapes, portraits, genres, speed-pictures, interiors, architectural subjects, airplane views and other subjects—and be expected to select five prizes, each of which may be of a different subject. Yes, the jury has a difficult task, and we should all try to be very patient with its members.

It is not necessary for me to point out that pictures of any good subject are eligible, provided they display a sincere attempt to have good composition and technique. This competition coming, as it does, at the

end of the vacation-season should enable a large number of readers to find suitable material from among pictures made during the summer. As always, originality of theme and treatment will appeal to the jury. However, it is not desired to encourage any straining after pictorial jazz-effects. In short, it is hoped that this competition will encourage a sincere effort along artistic lines which always have made and always will make their appeal to simplicity and truth. To be sure, we all will look at the startling and the extreme, whether it be in fashions or in photography; but, after all, it is the simple, truthful pictorial story which really holds the attention and grips the heart. We should aim to make pictures to live with rather than just to look at.

As this competition gives free reign to subject-material, it will be of interest to all to see how our friends use this freedom and what they elect to do with it. For this reason a miscellaneous competition is of interest and value.

A. H. BEARDSLEY.



BEGINNERS' COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U.S.A.



Prizes

First Prize: Value \$5.00.
Second Prize: Value \$2.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not* regular subscribers will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already* subscribers will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes, chosen by the winner, will be awarded in photo-materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

Rules

1. This competition is open only to beginners of limited experience with practical camera-activity, and whose work submitted here is without any practical help from friend or professional expert.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints and enlargements up to and including 8 x 10 inches.

4. Prints representing no more than *two* different subjects, for any one competition, and printed in any medium except blue-print, may be entered. Prints may be mounted or unmounted, as desired. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

5. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail.

6. Each print entered must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent at request. Criticism at request.

7. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he has received official recognition.

8. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with data.

9. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

Awards—Beginners' Competition Subject—Miscellaneous Closed June 30, 1925

First Prize: L. G. Wells
Second Prize: N. S. Chunekar

Honorable Mention: James Bell; Paul Douglas; Arthur Knapp; Paul L. Miller; Miss Doris E. Wright.

The Beginner and the Pictorial Harvest

SEVERAL thousand years ago a man who knew human nature better than most of us do today said something about sowing and reaping. He pointed out that as a man sows, so will he reap. In short, he showed that it is not possible to plant bad seed and expect a good harvest. Applying this fundamental truth to the beginner and photography, we cannot fail to note that the parable of years ago does function in this day and time, often with telling effect. If the beginner made no effort to master his camera in the spring and would accept no suggestions from the dealer who sold him the camera, then the beginner cannot very well expect a bountiful photographic harvest.

Let me try to make my point clear. Let us assume that early in June a well-to-do business-man plans to make a trip to Europe. A friend of his is a member of a camera club, and to him the business-man turns for suggestions as to the best type of camera for him to take on the trip. The camera club member goes over the matter carefully and suggests a folding roll-film camera with an anastigmat lens and shutter. They go to a dealer and purchase the camera, and our business-man has joined the ranks of the beginners in photography. Now, our business-man is a bit inclined to resent the many suggestions which his friend offers and, finally, takes the position that he has brains enough to master such a simple thing as a pocket-camera. When he goes to the dealer to buy his stock of films for the trip, he gives the kindly suggestions of the dealer a cool reception and mutters something to the effect that, "they must think I'm lacking in ordinary intelligence; why, I'm a college graduate and head of a large manufacturing-plant and know more about machinery than they'll ever know." Our business-friend goes on his trip, and day by day the rolls of film accumulate. He has no time to have any rolls developed *en route*, so that he does not know whether he is giving the correct exposure or not; neither does he know whether he is focusing correctly and composing his pictures attractively. At length, he arrives at home, takes the rolls to the dealer to be developed and printed. A few days later he calls to garner his pictorial harvest. He is chagrined to find that nearly sixty per cent. of his pictures are not worth the printing. The handsome, gold-stamped album which he had made especially to hold his pictorial record of the trip will have many blank pages. Of course, he blames his friend for suggesting that make of camera; he accuses the dealer of selling him old films and doing poor photo-finishing, and ends by consigning all things photographic to utter oblivion. In due time, he reasons the thing out and realises that had he listened to his friend and the dealer, and had he



EVIDENCE OF JUNE

L. G. WELLS

FIRST PRIZE—BEGINNERS' COMPETITION

mastered his camera as they urged him to do, he would have that gold-stamped album well filled with beautiful pictures which would be a permanent record and a pleasure for years to come. Had he sowed intelligently he would have reaped bountifully, pictorially and otherwise.

It is to be hoped that my readers will garner their pictorial harvest with pleasure and profit. To be sure, they will have made some mistakes; but as they sit around the living-room table and look over the pictures that were made this past vacation-season, may they smile with happiness and satisfaction as this or that familiar scene or face appears before them. From the letters that I have received, and the pictures which have reached my desk from all parts of this country and Canada, I believe that the summer of 1925 saw a step in advance in the general improvement of amateur photography. Not in many years have there been so many different types of good cameras available and not in years has photography received so much attention in magazines and newspapers. In conclusion, let me urge all those who may read these lines to look forward to the pleasures of photography this winter and keep the camera off that top shelf where moths, rust and dust may destroy it.

A. H. BEARDSLEY.

Beginners' Competition

JUNE roses form the theme of Mr. Wells's effort shown on this page. The two flowers are well grouped and, what is often badly done, well lighted. The camerist displayed good judgment when he selected, as a receptacle, a vase of a light color—neither white, nor black or nearly so. The gradations are not what they should be, although a 5-time filter was used. I fear that the exposure, one-fifteenth second, was inadequate to get those delicate *nuances*—a term one of our discriminating contributors is fond of. The one outstanding flaw in the composition is the dark rose-leaf which asserts itself so boldly. With a technique intelligently applied, it would have assumed its correct tonal value—a dark gray, and in that case it would have appeared as a pleasing feature of the composition.

Data: Made indoors; light from direct western sun; 3 P.M.; Ica Reflex camera; Zeiss F/4.5 lens; Zeiss 5-time filter; Eastman Film Pack; tank-developed; F. P. D. powders; enlarged on Velours Black Platinum Mat; nepera solution.

"Reflections" is one of the most pleasing efforts entered in this competition. It is an attractive architectural subject, treated in artistic fashion. The

reflections are not mirrorlike, but, indicated conservatively, they are agreeably visible against a watery-surface. The main building judiciously occupies the right section of the picture-area and is balanced quietly and naturally by a secondary structure—all united and appearing as a whole. The data do not supply any information regarding this interesting and picturesque group of buildings.

Data: Made in India; May 8, 1925; 10 A.M.; 3A Kodak; B. & L. lens; F/8; 1/100 second; Agfa roll-film; Rodinal; Velox contact-print.

WILFRED A. FRENCH.

In Defense of Design

DESIGN is a kind of exaggerated philosophy; and, therefore, its function may be expected to be more one of

rather a poor joke for the artist. We may almost imagine him looking with contempt on his picture after the critic has diligently traced for him the leading lines of the pattern of which he was previously unaware, and of which, as he would say, he was quite innocent.

A well-marked pattern is not the delight of everyone, but neither is a carefully recorded emotion. Design is for the Jane Austens of photography; in the others, lives the intoxicating spirit of Junius. And yet can it be seen how closely related are these two schools of artists. Junius' sentences were rich, but still they were sentences; and there may be gorgeous passages in the artist's picture, but still they are, in spite of the artist, passages in a design.

It is no accident that an artist may, in his picture, indulge his passion for neatness: it is not by mere chance, nor by the cunning device of an artist, that



REFLECTIONS

SECOND PRIZE—BEGINNERS' COMPETITION

N. S. CHUNEKAR

utility than of emotion. It is the best kind of philosophy; for all useful philosophy is exaggerated, otherwise it would be scarcely a philosophy, and certainly not useful.

Design, by some strange failing of the powers of appreciation, is rarely given its full measure of respect; and even the artist sometimes treats it as an underling. We look coldly upon a well-marked pattern in a picture, almost as if we had discovered an affectation in the artist; and the kindest thing we find ourselves able to say about it is that it is "too good to be true."

This inverted opinion of design, when it is held by the artist, need not necessarily affect his pictures—probably it does not—but it must strongly influence his attitude towards the critic; and the old joke about the critic finding a stronger composition in the picture than the artist ever dreamed of must often become

we are able to trace beautiful and powerful lines in a picture, which sweep through all the subordinate points of interest and emphasis, and rush headlong to some place of climax, whence issues the spirit of finality and satisfaction.

These things are only a witness to the design which is inherent in everything, and of which everything is a part; and the picture which we are pleased to call decorative, because the artist has emphasised the pattern in it, is not merely artificial, except in the sense that it implies an artist; it is not contrary to the natural order of things, but simply an artist's attempt to demonstrate that there is an order in natural things. It is artificial because the artist has had to exaggerate; but it is natural because what was exaggerated was the truth.

J. GARNETT HARPER in *The Amateur Photographer*.



OUR CONTRIBUTING CRITICS



THE ROAD TO SPRINGVALE

CHAS. A. PIERCE

THE PICTURE CRITICISED THIS MONTH

Whoever sends the best criticism (not over 200 words) before the last day of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

"THE ROAD TO SPRINGVALE" is a pleasing picture, as the printing is excellent with no harsh contrasts. The composition, however, lacks one feature, the principal object of interest. An observer following the gist of the title would naturally consider the road as that one thing, allowing his eye to follow it to the distant bend with visions of Springvale in the distance.

The rocks on the right, unfortunately, are not content with an obscure position and do surely draw the eye to another road which apparently leads to the woods or fields and not to Springvale.

An improvement would be the elimination of these rocks leaving only a faint suggestion of this other road and at the same time trimming off the uninteresting foreground. To improve matters, a new camera position is essential, keeping the principal object preferably to the right; in this case arranging the scene to suit the different viewpoint. However, I like the picture as it is for its charming interpretation of—well, a road to Springvale.

JAMES BELL.



It is undeniable that a photographer is often at the mercy of conditions which he is powerless to control.

If the day be cloudy he cannot say, "Let there be light!" and receive suitable illumination for an exposure; neither can he say, when the sun beats down producing blank highlights, as in the above print, "Let there be shadows!" and be obeyed. All he can do is to wait on atmosphere, and when the opportune moment arrives, trip the shutter. This, Mr. Pierce has not done. Because of this, he has a picture valuable only as a record. Had our photographer desired an artistic print he should have waited for the following change in conditions.

In the first place, he should have awaited more favorable lighting. The sun was undoubtedly high in the heavens and, as a result, there are no soft lights or luminous shadows. Indeed, the suggestion of glare is prevalent throughout the print.

Secondly, the road has not been given enough prominence. The trees and foliage on the right stand oppressively prominent. Besides this, the shrubbery is but a mass woefully lacking in detail. The general effect of the print is spoiled on this account. To prove this, cover up the right half of the print and see if there is not a great improvement.

ARTHUR L. MARBLE.



IN landscape-pictures light and shade help much—in fact may be said to be necessary to effective work. I think this picture would be much more satisfactory if made on a sunshiny day—with transparent shadows and bright patches of sunlight to render life and contrast to a rather flat and uninteresting subject.



STEEPLE AND ROOFTOP

E. S. SMITH

YOUR CRITICISM IS INVITED

Then again we have the question of a baldheaded sky. The sky was probably blue or gray, and the photographer in rendering it white is sinning against nature. When one has to have much sky in a picture, it is well to use a light, yellow filter, unless one is sure that he can catch a distinct cloud.

I should also say that the negative would have stood a little more exposure in order to give a clearer rendering of the tree trunks which in this case are simply black streaks.

I can't say that I like the composition: "The Road to Springvale." There are two—which is which? Also if the well-traveled road is *the* road, why include another road? Autoists in a strange country are sometimes perplexed by similar conditions.

I should say that the chief fault of the picture is that the photographer does not seem to have a clear definite idea that he wants to bring out—a message to deliver through the medium of photography—an emotion to depict or suggest.

E. L. C. MORSE.



Monomarks.

AN invention has been made public in London, recently, which is bound to find innumerable applications in commercial and private affairs. The Monomark represents a system which supplements the postal system. It is based on the use of an individual

mark which is allotted to a firm or to an individual. That mark has simply to be written on an envelope or postcard, with the addition of the word "London" in order that the communication shall reach the owner of the mark. In other words, the Monomark is the shortest equivalent for a name and address which can serve for postal purposes. Its length need not exceed six letters or symbols and thus can be readily inscribed not only on private property but on commercial goods of all descriptions, without, however, disclosing the identity of the owner of the mark. It is needless to dwell upon the many commercial benefits which will be derived from the extended use of this improved channel of communication between the world-be seller and the would-be buyer of goods, or upon the effect which it will have upon photographic trade and the prevention of underhand dealings in commercial life.

Unless the system is patented or copyrighted, there is no reason that it should not be introduced and managed by some enterprising firm in the United States.

Art Objects

IN a store-window
Down town
There is a
Display of
Futuristic
Paintings,
And there is a
Sign in the window

That says
"Art Objects",
And when I
Looked at the
Pictures
I could not
Blame Art
For objecting. *Judge.*



OUR ILLUSTRATIONS

WILFRED A. FRENCH



AWARDED the first prize in our "Marines" competition, June, 1923, and published in the following September issue, "Sunburst", by William S. Davis, again appears, but this time as the frontispiece of the current issue, at the request of several subscribers, who also wished to see it reproduced in a larger size. Appearing thus, this superb marine picture assumes increased impressiveness and grandeur. At the time of its initial appearance, I wrote in this department as follows: "Lover of nature that he is, William S. Davis could not resist the temptation to capture the radiant, spectacular sunburst he observed on a stormy day, October, 1922. His experienced eye, guided by true artistic perception, enabled him to select the proper moment when the large, brilliant masses yielded a well-composed picture. It is doubtful that a more magnificent aquatic spectacle can be imagined, and our artist proved an adequate master of the resources at his command. Numerous have been the attempts to perpetuate, photographically, similar scenes; but the camerists generally were unequal to the requirements of the occasion—the results either lacking clearness of definition and proper spacing or revealing signs of unpreparedness and haste. Here, however, there is no opportunity left for adverse criticism—there is only an invitation for unstinted praise." The beginner can easily understand that if two inches were taken from the top of the present picture, the result would be to bring the water-line exactly in the middle of the picture and divide it into two equal parts, which is an error in pictorial composition—one to be avoided in pictures of this sort. About one-third water and two-thirds sky is the rule generally adopted by masters of composition.

Data: Made off the eastern end of Long Island, N.Y.; stormy October day; 3.30 P.M.; $3\frac{1}{4} \times 4\frac{1}{4}$ home-made folding-camera equipped with 6-inch Ilex Anastigmat; used at F/6.3; 1/25 second; Camera Inst. Iso plate; pyro; enlarged on Eastman Portrait Bromide paper, Grade D, Rough Mat; supplementary title by Mr. Davis, "The Lamp of Day Hangs o'er the Deep."

The portrait of a native of Guinea, page 123, leaves the geographical student in doubt as to what locality of this large tract of African coastland this dark-skinned individual belongs; for Guinea is made up of a number of independent states and European settlements. No doubt, numbers of his class may be found in the French army which, until recently, has been occupying the Ruhr district. Ethnologically, it may be interesting to compare this species of the human race with the Caucasian. As a pictorial subject, this son of Guinea must be a grateful one, when seen in full native costume, from head to foot. As shown here, he appears strikingly picturesque; but with his sombre, turbaned head rising above his white tunic—monotonous and without gradations, he presents strong contrasts in tones, and a reversal of tonal masses which makes the whole picture look top-heavy. There appears no support to the head.

In "Three Wagons", page 124, is presented an unusually fine example of the circular form of composition. Two of the teams are at a stand-still, while the third one is in motion. Variety is imparted to

the picture by the happy circumstance that the nigh horse in two cases is white. The setting is kept fittingly in a low key, and no obtrusive objects are lying about, so that the various parts combine to make one harmonious whole. As to the choice of horses in the nearest team, there may be some observers who prefer that the white horse take the place of the dark one, so as to improve the composition. As for myself, I have come to the conclusion that the horses are placed satisfactorily as they are. I also take it for granted that had the artist wished to transpose the two horses in the foreground, to conform to his desire for good pictorial effect, he could have induced the driver to make the temporary change.

Data: Made at Seattle; May, 1925; 3 P.M.; hazy light; 4×5 Graflex; $8\frac{3}{4}$ -inch Wollensak Verito; at F/5.6; 1/25 second; Eastman cut film; pyro-soda; enlarged on P. M. C. No. 3.

"Loretta", page 125, is a naturally posed portrait in a high key. The contrast between the sitter and background appears a little too strong, as most portraits of this character look better when the entire scheme is in a high key.

Data: Made at home, by artificial light; F. & S. 8×10 Home-Portrait Camera; $14\frac{1}{2}$ -inch Wollensak Verito; at F/6; 1 second; 8×10 Eastman Portrait Film Par Speed; tank-developed with Eastman Powders; contact-print on Eastman Athena Vitava D.

Although PHOTO-ERA has laid great stress on the importance of simplicity in pictorial composition, for the past twenty years, the elementary principles of this very necessary study, as set forth by our friend E. L. C. Morse, pages 126 to 128, will be appreciated by budding pictorialists. The writer of this desirable lesson has already analysed the merits of the example he has selected for his purpose—"Hilltop" (page 127) by the famous English pictorialist, F. J. Mortimer, F.R.P.S.; therefore, no comment from me is necessary. Incidentally, it may be well to remind the observer who may not be familiar with the work of Mr. Mortimer, that he is noted chiefly for his achievements in marine-photography, although he is an admirable worker in genre and, moreover, a landscape-painter of uncommon ability.

Dune-land always tends to lure the camerist, and E. L. Hooper is no exception. His "Path through the Dunes", page 132, shows that he appreciated the pictorial possibilities of the grass-covered mounds of sand near the sea-shore. Had he chosen to observe these grateful camera-subjects, however, how they adapt themselves to the artistic purposes of the discerning, watchful worker by casting long, picturesque shadows, later in the day, he would have discovered themes even more pleasing and attractive than the one he selected. Nevertheless, his picture is well spaced and indicates artistically sympathetic and skilful handling.

Data: Made at Gloucester, Mass.; September, 1 P.M.; bright light; $3\frac{1}{4} \times 4\frac{1}{4}$ Kodak; $4\frac{3}{4}$ -inch Isostigmat II; at F/16; Kodak Sky-Filter; 1/25 second; Eastman Autographic roll-film; Eastman tank-developer; print, Novabrom Vigorous, Smooth.

Most of the photographs that were made of the

great Solar Eclipse, were of a scientific character. Few possessed any particular pictorial merit. The photographer was more concerned with the technical operations of the exposure and impressed or overawed by the grandeur of the phenomenon, so that he scarcely had time to consider the artistic side of his undertaking. However affected she may have been, as she beheld the astronomical spectacle, Dorothy Jarvis instinctively perceived and secured an inspiring picture of genuine, artistic merit, page 133. Here is a picture of paramount scientific import, that simultaneously fulfils the requirements of an attractive, pictorial composition. Spacing, foreground and technique are alike admirable.

Data: Made at Westerly, R.I.; to quote from her letter which accompanied the print: "The eclipse-picture was made more from a pictorial point of view than from a scientific one. Indeed, I was so impressed with the strangeness and beauty of nature under those unusual conditions, that I could only think of the Benedicite Omnia Opera in the Prayer-Book, with the line, 'O ye Sun and Moon, bless ye the Lord!' My exposure-data are rather vague."

The beholder is impressed by the truly artistic and poetic interpretation of the evening-scene pictured on page 137. Beautifully spaced and balanced, harmoniously and spiritually expressed, Mr. Gerhard's picture makes an irresistible and lasting appeal.

Data: Made near Mount Vernon, Wash.; June, 6.30 P.M.; bright cloudy sky; B. & L. Tessar II b, F/6.3; at stop F/16; 1/2 second; Eastman Cut Film Com. Ortho; Ortol; print, Iris E Smooth Mat Buff.

Those of our readers who have noticed the interest L. J. Creagan has shown in the Beginners' Competition during the past few years, will be pleased to know that he has been graduated, by himself, to the "Advanced Workers" Class. It was natural and praiseworthy progress. His contribution to the Miscellaneous Competition, which closed June 30, was sufficiently meritorious to win Honorable Mention. It appears on page 145. As he requests that it be not criticised, I refrain and leave it to the readers to perform that pleasant duty.

Data: Made at Princeton, N.J.; June, 5 P.M.; bright light; 3 1/4 x 4 1/4 Ica-Trona; 5 1/4-inch Carl Zeiss F/4.5; at F/8; 1/10 second; Agfa Film-Pack; metol-hydro; enlarged on P. M. C. No. 8 with soft-focus disk.

On a preceding page, I stated that there was at least a suggestion of a pictorial effect in an airplane-photograph. In "Twin Lakes", page 147, however, appears a deliberate and successful effort to create an artistic composition from a place high in the air. It looks as if the aerial photo-pictorialist, Capt. A. W. Stevens, had stood with his camera on the top of a lofty tower several thousand feet high, or on a nearby mountain-peak, where he could deliberately observe and study the magnificent mountain-scenery spread out before him and make his preparations for a successful exposure, so superbly lighted, well-composed and faultlessly executed is his picture. The twin lakes, far below in the foreground, are clearly presented, yet they are but a minor feature in this great mountain-group. In this vast picture, there is not one discordant note—mountains, forests and lakes form one grand, harmonious whole, upon which the beholder, the nature-lover, may feast his eyes, with fitting thoughts of the power of the Great Architect.

Quite different in character, yet striking and impressive, is a remarkable interpretation of Mount Adams, in the Presidential Range, White Mountains, N.H., page 150. After passing three planes, the eye stops before Mount Adams, which in its complete winter-dress is not easily recognisable. Seen in its present state, it assumes the appearance of a mountain-peak of

far greater height than 5800 feet, and it might easily be mistaken for one of a formidable mountain-range in Colorado. The camerist has managed the foreground and middle distance so adroitly as to make his mountain appear much higher than it is. *En passant*, Mr. Pote was in the Beginners' class until he took courage and entered this mountain-picture in the Advanced Workers' "Miscellaneous" competition, last June.

Data: Made from the nineteen-mile brook-trail, Carter Notch, N.H. while on a hike with fellow-members of the Appalachian Mountain Club, Boston; January, 11.30 A.M.; bright light; distance to Mt. Adams ten miles; 3 1/4 x 4 1/4 R. B. Graflex; 13 1/2-inch Busch Telephoto lens; F/32; 3-time filter; 1 second; Eastman cut film; pyro; enlarged on Novabrom Vigorous Smooth Mat.

An Ill-Timed Criticism

VISITING a Bromfield Street picture-store one day, last month, I observed a well-known pictorialist examining a beautiful, but poorly composed color-print. "I like this landscape," he remarked to the dealer, "and what is the price?" "Four dollars," was the answer. "But it contains two separate and distinct pictures!" exclaimed the critical customer. "Oh well; in that case, the price is eight dollars," was the dealer's calm reply.

Keep Your Eyes Open!

SHORTLY after the section containing my analysis of "Three Wagons", on page 124, had been written, I happened to drop into a neighbor's office where, hanging on the wall, was a picture that startled me. It was an engraving of two head of cattle fording a stream and walking towards the observer. The "high" animal, or the one on the right, was white, whereas the other, or "off" one, was black, both animals occupying the same relative position as the span of horses in the foreground of the "Three Wagons", referred to above. I explained the cause of my astonishment to the owner of the picture and he, too, considered it a rather unusual circumstance.

This incident is not related as a coincidence, but rather to show what is likely to happen to one who is critically observant.

Opposed to Snapshotting and Snapshotter

ALTHOUGH intended to appear on the "Groundglass" page, if accepted for publication, the following communication from an appreciative reader is of so critical a nature, that it may well find a place in this department.

"Sir.—I believe that the use of the admirable words snapshot, snapshotting and snapshotter originated in PHOTO-ERA, so that the editors of your progressive magazine ought to be congratulated for their courage in the choice of proper terms, photographic and otherwise. Unfortunately, such illogical words as "snapshotting" and "snapshotter" have been coined and adopted by certain newspapers without apparent protest from photographers. I and many of my friends consider them silly and hope that sensible photographers will taboo them. Your equivalents are by far the best and worthy of universal adoption. If "snapshotter" were correct, why should not a crackshot be called a "crackshotter". Of course, it is "crap-shooter", not "crap-shotter". If crap-shooters are arrested, "crap-shotters" ought to be twice over; and "snapshotters", too. F. M. P.



ON THE GROUND GLASS

WILFRED A. FRENCH



The Adhesive Label

THE small, adhesive label plays a useful rôle in photography, not only as a means of advertising but of protection. Some of the photographic dealers in England, whom I had occasion to patronise during my last visit there, in the spring, would attach a small, narrow, adhesive label to the outside of my package. I came across one of them the other day. It read—"TAYLOR & CO., LTD., CHEMISTS, over 100 Branches in the North. 13, Market Place, Ripon". Its double purpose was apparent. Now if Dr. Pardoe, or any of his many imitators, were to stick one of his own neat adhesive labels on the parcel he receives at a dealer's, it would serve as an additional protection. Of course, this does not prevent a thief from appropriating the parcel, if he gets the chance.

All that is now necessary, is for the package to be substituted by a receptacle in the form of a hand-bag, satchel or brief-case, which, if every dealer or merchant affixes his sticker, in the course of time will be plastered all over with labels of every size and color, and resemble a tourist's suitcase decorated with innumerable hotel-labels and custom-house stickers. There is a limit to every good thing.

That Tired Waterline

I HAD a few words to say, June issue, about the tired, slanting, sagging waterline that mars so many otherwise beautiful marine-photographs. I forgot to say, however, that this piece of carelessness on the part of the photographer—the amateurs err the most—is not confined to the products of photography. It may be found in commercial art-prints.

A friend, who is very fond of marine-pictures, has two large imported color-prints. They are superb in subject-material (a sailing-vessel in a spanking breeze) although in each case the sea is fairly tranquil, only white-caps showing. Admiring them, one day, I thought that the waterline in one of them had begun to settle at one end. I measured the distance of the horizon-line (the waterline) to the base-line of the picture, at each end, and found a variation of one-eighth of an inch, the base-line being twenty-eight inches long. It could not be that the painter of the original,—an oil-painting,—who is an artist of considerable renown, was at fault. It is more than likely that during the process of reproduction a cog slipped, somewhere. To the average observer, such a slight error in parallelism is not apparent. In fact, the owner of the above-mentioned marine-picture had not noticed it during the past five years that the print has been hanging in his office, until his attention was drawn to it.

A Distinction of Sex

"YES, sir!" cheerily and expectantly the salesman of a Bromfield Street camera-shop greeted a prospective lady-customer, as she approached his counter. "Yes, madam, if you please!" smilingly corrected the lady.

Penny-Wise, Pound-Foolish

THE story is told of a certain photo-finisher doing business in a town near Boston, who, after having made his purchase at a stock-house in Bromfield Street, left in a hurry and—a small, flat package on the counter. Halfway to the railway-station, he remembered the package left behind, hastily retraced his steps and re-entered the stock-house only to find that some friendly clerk, seeing the package addressed and stamped, had promptly taken it to the nearby post-office and mailed it. Great was the mental agony of the photo-finisher, for the package, though apparently prepared for mailing to his customer (to save time in the future) actually contained undeveloped films received that very day, and were to be photo-finished during his vacation in the Maine woods. His predicament, and the prospect of a still greater one after the package (mailed prematurely) should reach his customer, may be easily imagined. Of course, an immediate telegram explained the unexpected situation. This cost him also the loss of his train and an overnight's stay in Boston; but never a word of complaint of the officious, but well-meaning and unhappy clerk.

A Pun in the Right Place

THE following, amusing incident occurred at a certain art-exhibition, in New York, this past summer. In addition to numerous paintings and statuary, there were several bas-reliefs, so eccentric in design and so poorly done, as to cause many a smile and adverse comment. Desiring an honest expression of opinion from a well-known art-critic, who was present and had seemingly overlooked them, the artist had the temerity to make known his desire. Giving one swift glance in the direction of the luckless bas-reliefs, the critic snorted, "Bah!"

What! Another Pun?

THE dabbler in cinematography submitted his first positive reel to a prominent producer. "How do you like it?" eagerly asked the budding cinematographer. Examining the offering and returning it, the producer replied, in a theatrical tone, "Go thou and 'cin' no more!"



Seeing the Light

FIRST PICTORIALIST—"I notice X. over yonder standing for a long time, bulb in hand, staring into vacancy. I wonder if he knows enough to use a camera!"

SECOND PICTORIALIST (sarcastically)—"Can't say. Judging from appearances, he's just waiting for the light."



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



The Restoration of Faded Prints

THE discovery that a valued print, some months or years after making, has gradually developed yellow stains, either in patches or all over, is often a source of disappointment to photographers. It is not usually known that such damage can be remedied.

The stains we are considering now are quite different from those which are due to faulty development, and are always visible immediately the print is dried. The stains that develop very slowly on bromide and gaslight papers, often only after several years, are usually due to the action of traces of hypo left in the print, which slowly reacts with the black silver-image, forming yellow silver sulphide—a result identical chemically with sulphide toning. A similar result follows when prints have had prolonged exposure to an atmosphere containing sulphur-fumes.

It would appear that the best way of curing such a print would be to sulphide-tone it completely, so that the black parts and the yellow patches would be brought to the same color. If the color of the print is of no consequence, this is certainly a sound way of preserving old faded record-prints. In most cases, however, the black-and-white print will not be in a condition to give a good brown or sepia on toning, and a washed-out yellowish result will be obtained. This will almost invariably be the case with gaslight-prints, and not infrequently with bromides.

If, however, we desire to try this method of curing a faded print, we first give it a thorough wash, and tone in the usual way. If the permanganate bleaching-bath, given below, is used instead of the ferricyanide and bromide formula, the preliminary washing is unnecessary; as it is also if the hypo-alum method is used. The toned result is all silver-sulphide: and this is probably as permanent a condition as any in which to keep a valued record-print.

If, however, the color which this would give is objectionable, and we want to restore the print to its original condition of black and white, it is easy to do this, although the process is little known. The following formula is due to Mr. T. H. Greenall:—

A

Hydrochloric acid (concentrated), 3 ozs.
Water to make 20 ozs.

B

Potassium permanganate, 49 grs.
Water to make 20 ozs.

Both solutions keep indefinitely when well stoppered. For use, one part of A, one part of B, and six parts of water are mixed.

This bleacher can be used in place of ferricyanide and bromide for sepia toning, and has the advantage of making a long washing after fixing quite unnecessary; a short wash only is needed before putting the print into the bleacher. If much hypo is left in the print it may be necessary to pour away the bleach, and replace it by a fresh lot before the print is completely bleached, as the hypo uses up the perman-

ganate. A short rinse, after bleaching, is all that is required before putting the print into the sulphide bath.

This bleacher also has the property of bleaching silver sulphide back to a developable condition. It actually transforms it into silver chloride. Thus, when a faded print is placed in this solution, both the black and the yellow portions are turned into white silver chloride in a few minutes. When the bleaching is completed the print is given a few rinses to remove the surplus permanganate, and then redeveloped in an amidol or M.Q. developer. In the developer the image is restored to its original black form, and any brown permanganate stains will be dissolved away.

If we wish to try the effect of toning, the print after bleaching and rinsing should be put straight into a solution of sodium sulphide, when the image will appear either brown or yellow, according to the depth of printing, and the type of paper: any brown stain will also disappear.

If the result is unpleasant in color—the print should be dried before deciding this, as the tone often changes on drying—it is still possible to restore the print to the black-and-white form by re-bleaching and then developing.

This process, in addition to being useful for restoring faded prints, will often save a bromide print which has not been developed sufficiently for satisfactory toning; instead of throwing away the unpleasant colored print that results, we can bleach and re-develop it, and it will be restored to its black-and-white form, in which it may be quite satisfactory.

CHARLES LIGHTON in *The Amateur Photographer*.

Drying Photographic Prints

A METHOD of drying photographic prints which gives them a slight, pleasing curl, suitable for unmounted double-weight papers and postcards, is easily accomplished by drying the same around a large diameter bottle.

A piece of blotting-paper, slightly larger than the print is placed against the side of a bottle—let us say six or eight inches in diameter—and the wet print placed back side upon this blotting-paper; and place over the face of the print a piece of waxed paper. This procedure is followed for the remainder of the prints after which a piece of blotting-paper and thin cardboard is placed over the entire series and the whole held in place by means of wrapping-twine. However care should be taken not to wind the twine too tightly.

W. J. EDMONDS, JR.

Practical Photographic Pointers

I AM very sure that the readers of PHOTO-ERA MAGAZINE are not selfish nor are they unwilling to help "the other fellow" photographically and otherwise. However, it is a task to get sufficient original material for this department. Perhaps there is not sufficient interest; but if there is, let me ask my readers to send in helpful, practical items and to do so as soon as possible.



THE AMATEUR KINEMATOGRAPHER

HERBERT C. MCKAY



Let Us Hear from Amateur Kinematographers

THE suggestions contained in the following paragraphs may lead to something of mutual value and practical service or the whole idea may not be feasible or desirable at this time. Let me make it very clear that I have no desire to add to my present responsibilities. In fact, I am trying to find a way to be relieved of some of them. However, if PHOTO-ERA MAGAZINE, through its Publisher, can meet a need and serve its readers, and others as well, then the extra time and effort will be given gladly. A. H. BEARDSLEY.

SHALL THERE BE AN AMERICAN ASSOCIATION OF AMATEUR KINEMATOGRAPHY?

The July department informed you of the activities of the Ciné Club of America with headquarters in America. This organisation is doing some fine work and fills a field which may be made to yield rich returns. However, this organisation is not just what we have contemplated, so while wishing the C. C. of A., the utmost success and assuring that organisation of our heartiest sympathy and support, we have decided to go ahead with the plans for our own organisation.

There have been several kinematographers who have written concerning the proposed club, and everyone seems to approve the move. With the support which has been pledged, we are encouraged to present at this time a definite program. The following is published for your criticism and approval.

The name of the organisation shall be The American Association of Amateur Kinematographers.

The objects of this organisation shall be:

1. To give mutual assistance. To further this point, plans, discoveries, hints, formulæ and so forth will be supplied by members for publication in the Association Bulletin.
2. To promote fellowship among the amateur kinematographers of this country.
3. To secure, if possible, certain discounts from the prices of standard apparatus. This can only be done by securing a membership sufficient to warrant manufacturers granting wholesale prices to the Association.
4. To aid members in turning their work into financially profitable channels. This is a semi-professional point, but there are many photographers who cannot afford to purchase amateur equipment. Many of these would make such purchase if they could be reasonably assured of a moderate financial return. Thus we may extend the interest in the movement.
5. To render such other aid as may be approved by the members.

This shall be an organisation to *serve* the amateur kinematographer, and shall be governed, insofar as is possible, according to the expressed wishes of the majority of members.

As the principal aim of this organisation should be to stimulate interest in amateur kinematography, the membership should not be limited to camera owners. There should be no restrictions upon membership

other than the requirement that candidates have an interest in the work. Membership should be divided into two groups, associate and active. The associate membership would carry with it limited services and should be formed of non-operators who wish some guidance in starting in this work. The membership fee would be less than for active members.

There should be no age limit. Experience in other sciences and arts have shown us that often the person who is but a child in years has done outstanding work. There should be no exclusion of women, for some of our best photographic artists have been women. In short, there should be no restrictions other than that stated.

Should conditions warrant, there will be established a membership degree which will be conferred only when the candidate shall have submitted a film which shall measure up to a certain established standard. This membership shall correspond to the fellowships in learned societies; but before such a move may be made, the organisation shall have to prove its own worth. Otherwise such membership would be insignificant.

There shall be no distinctions made on the basis of the kind of equipment used by the kinematographer. Free-lance news cameramen who are beginning, semi-professional operators, owners of the nine and sixteen millimeter cameras shall all be admitted without question. Any member shall be a potential help to the society. However, the bulletins and such other publications as may be issued from time to time, will be issued while recognising the fact that most of members are owners of sixteen millimeter cameras.

The organisation itself shall be a loosely united one. Local chapters will be authorised whenever membership and other conditions warrant. Such chapters may limit their membership as they see fit. The national organisation should be an affiliation, rather than a single organisation. Thus by leaving the local government in the hands of the local chapter, each chapter may cope with its individual problems. When a sufficient number of similar chapters shall be organised, a department shall be created for their benefit. Thus the news-men may come to have a chapter of their own, amateur chapters which include amateur dramatic organisations shall have their department and so forth.

The official organ of the society shall be the PHOTO-ERA MAGAZINE.

In addition to this, the first receipts of the society shall be devoted to the purchase of multigraph equipment in order that special bulletins may be issued to members at any time when the necessity shall arise.

We have the opportunity to organise a society which shall foster great advances in the art. No one may doubt the great benefits which are due to the activities of the Royal Photographic Society of Great Britain. We may in time achieve a like organisation in our chosen field.

I should like every reader of PHOTO-ERA MAGAZINE to answer the questions as suggested below. Remember that this is a pledge only. DO NOT REMIT ANY MONEY AT THIS TIME.

H. C. McKAY
Eustis Florida

I ^{am} not interested in the American Association of Amateur cinematographers. (If interested, fill in the following.)

When the Association is formally organised I pledge myself to apply for an ^{active membership at \$5.00 per annum.} ^{associate membership at \$3.00 per annum.}

I ^{approve} ^{do not approve} the issue of a membership button, a suggested design for which I ^{do} ^{do not} enclose herewith, said emblem to cost not more than one dollar.

I ^{do} ^{do not} enclose suggestions for changes in the plan of organisation.

(Name).....

(Address).....

We all know Mr. Beardsley and I am sure you will agree that he has been of great help to us in fostering interest in this movement. Therefore, if he will accept the position, I wish to suggest that he be named our Treasurer for the first year. As there are no established chapters, I will assume the responsibility for the issuance of the bulletins and other matter which must be issued from headquarters. By the end of the year I hope that there will be some local chapter large enough to assume the responsibilities of headquarters.

Exposure and Light-control

A KINEMATOGRAPH camera has two adjustments to control light-action upon the sensitive negative-film. One is the lens-stop; the other is the proportion of open to closed sector in the rotary cover shutter.

Stopping down the lens does two things: it diminishes the intensity of the light passing to the emulsion for a given turning-rate, and it increases the depth of focus of the lens. Every number on the lens-diaphragm ring represents a setting of the stop which will allow twice as much light to pass as passes with the next higher number. For instance, F/8 passes twice as much light as F/11, and so on.

If the camera is fitted with a reasonably good lens, it will give as sharp a picture of the actual object which is focused, with a large stop as with a small one. In filming a distant scene, stopping down the lens does nothing but diminish the exposure-effect; but in filming a scene where close-ups and distant objects all have to be rendered sharp together, the more a lens can be stopped down, consistent with full exposure, the better.

When the lens is focused upon closeup figures, and the background appears badly diffused, it does not indicate that the lens is an inferior one. Probably little difficulty would be found in getting a sharp focus upon any one object in the field of view if this were specially focused. The cause of the trouble is likely that the lens in use has not sufficient depth of focus.

An unusually long-focus lens may account for this; for the depth of focus diminishes for the same F/-number of aperture as the focal length increases.

With any lens, the depth of focus is at its greatest when the lens is set to the infinity mark; and becomes less and less as the lens is focused upon nearer objects. When the light allows of stopping down, the right procedure is first to turn the diaphragm to the selected stop, then to focus the main object whatever it may be, and finally to see that the distance is as sharply rendered as we are able to get it consistently with the requisite definition in the near objects.

Controlling the duration of the light-action by means of the rotary shutter-aperture has no influence

upon the sharpness of the picture, except when we are filming rapidly moving objects. Then, too much closing down of the shutter-blades may produce double or even triple outlines in the projected image. This effect is not visible upon the film itself, and so cannot be observed until we actually see the picture projected.

The rule, for the beginner at any rate, is to keep to the one-third-open circle setting for the shutter-blades. This corresponds with an exposure-time for each picture of about one forty-fifth of a second, provided the camera-handle is turned at the normal rate. With the lens fully open, the film will receive about fourteen times as much light for each exposure, a very necessary requirement for filming scenes on dull or foggy days.

The cinematographer will be well advised to study his own particular lens to enable him to get the best results; and though this may take some time, his eventual results will reward him.

P. H. BRAITHWAITE.

The Screen

A FRIEND of ours brought a Pathé Baby kinematograph from France. I studied out all the directions which were in French, by the way, and translated all the metric measures into English. He and his wife drove up to the house, got out, walked up to our house, met the missis, and the three went back to the car and drove off. I did the cranking. Took particular pains to have the tripod good and firm. Lens, F/3.5. Having no developing-apparatus, had the agent do it. Next night had the folks witness the trying-out at our house. Large room; had to secure complete darkness. Pictures rather faint and disappointing. Studied the matter over. Had an idea. Took one of these folding screens that you use to keep the heat of the fire-place from your face, or one of those you use in a bedroom to keep the light from the street-lamps shining in your face all night. Made a sort of tunnel or subway out of it. Took some pure white paste-board and tacked it at the end. Tried it. Worked excellently, everybody satisfied. Discovery—the white sheet previously hung in front of a heavy dark curtain the night before was inadequate as a screen—wasn't impervious enough, wasn't white enough. Further discovery—you don't have to darken your room completely, provided you have a way of shutting off the light from your screen; but your screen must be glittering white and impervious.

Amateur cinematography is not very difficult for a man who will study how to do it. It is excellent amusement. Fifty years from now the grandchildren will be startled to see great-grandma come to life again in that picture and walk down to the car, enter and disappear down the road. Surely, it beats the old-fashioned souvenir-album. E. L. C. MORSE.

Photographing Nature

THE making of scenic or travelog motion-pictures for the theater-going public is a thankless job at best. Many cinematographers have spent their time and money for the purpose of bringing on to the screen the wonders and beauty of nature, but have failed, financially. Of course, everyone cannot appreciate beautiful scenery, for that would be indeed, not natural; but the conditions at present regarding these films is something like this: There are hundreds of reels of scenics lying idle in the film-vaults of the exchanges, because the theater-owner will not, as a rule, book them, except as a "filler" or as a substitute. Years ago, men like Burton Holmes and Newman traveled around the world, time after time, for the sole purpose of recording their trips on the kinema celluloid for the public. For a time, these pictures were run as a series

in some of the theaters with a fair degree of success. Then the public seemed to tire of these pictures, until now, you will very seldom see such pictures.

There are now several men, such as R. C. Bruce, who inject into their scenics, little simple stories, or at least some "human interest". These men had the foresight to realise that if their pictures were to sell, they must give the public what it wants. Now, Mr. Bruce specialises in short reels which the better theaters use during the overture. The scenes are made so that they have a bearing upon the music being played.

Now then, what are the people who enjoy pictures of beautiful scenery and nature going to do? The only way out is to make their own scenics, if circumstances permit. The making of kinema scenics offers the nature-lover two very good things. First, in order to make pictures, he must get out in the woods, fields and shores. And I can't imagine anything better for a person's health and happiness than tramping through "nature's world". Secondly, he has a record of all his outings which he can enjoy over and over again, and also entertain his friends.

Everything in nature offers picture-material. You will never run out of material if you only know where and how to look for it. In the country you have the open fields, with perhaps a few cows or horses grazing,—which in themselves offer picture material,—you have the woods, mountains, rivers, lakes and countless other subjects, out of which can be made beautiful pictures. And there is no limit to animal-photography, which is better adapted to the motion camera, for the reason that animals very seldom remain motionless for any length of time. And "movies" of animals in action more than repay the photographer for his trouble.

The seashore is a very fertile place for the scenic maker. Here you have the surf, rocks, sand-dunes, picturesque sailing vessels and light-houses. Here again, the motion-picture camera is to be preferred, for with it you get the surf in action, the waves dashing themselves upon the rocks. For an immobile object, however, the still camera will yield better results, for on the screen, these objects would seem monotonous. So, for health and enjoyment, take your camera.

KARL A. BARLEBEN, JR.

The Future of the Motion-Picture

MOTION-PICTURES, up to a few years ago, were looked upon as a means of entertainment only. But now a new era is upon us, and the use of the "movies" has increased. Not only do the "movies" afford us amusement, but also education, for practically all school-matter can be taught better and quicker by pictures. In fact, visual education has advanced to such an extent, that many schools are now teaching history, geography, English and many other studies by the kinema.

Many people question the years left to the motion-picture industry. The fact is, though, that the industry is growing at a rapid rate, not only for theater-use, but for educational purposes. Many new firms are specialising entirely in pictures of educational value.

Just think how interesting it would be, could we see all the prominent figures in history *live* before us on a screen! What lessons could we learn in engineering could we see the Chinese building that famous wall? There is one consolation in the fact that our children will be able to see how we have done things in our time. The World War will happen again on a screen for their benefit, Wilson will again make his speeches. Such records are priceless. The children of the future will see history instead of read it, and in so doing, they will remember longer and learn quicker.

Where do we get all these records from? Well, the news-reels contribute the greatest amount, and the government runs a close second. These reels of film are kept in the archives for future generations. Much material is already on hand, and the supply is forever growing.

So much for historic records. Educational films are also with us to stay. Why do you suppose the government spends a great deal of money in making pictures of all the industries, arts and crafts? To *teach* people the correct method of each subject. For example, many reels have already been made of farming. Here's a simple subject? Well, look at these films, and see how simple it is, with new machinery and implements being added year by year! These pictures show the farmer how to do things easier, better and for more profit. Such pictures are truly a boon to the public. Not only are these pictures of interest to those who belong to the profession the picture concerns; but to everybody in general, for we are all curious as to the what, why and how of things.

Why travel to see the beauties of distant lands, when thousands of feet of film have been made to show you what the other parts of the world look like? Are these wasted reels? For those who cannot afford to travel, but would like to see how other people live in other parts of the world—what are they to do? Now the "movie" comes along and shows all these things while you sit comfortably in a chair, not a mile away from home, or even right in your home. What more could be desired?

From the foregoing, it will be seen that the motion-picture is a friend and faithful servant to us all, and now that motion-photography has lured most of us, make it do something worth while, as well as entertaining. This can be done in a great many ways, for the field is limitless, as far as subjects are concerned. Keep a history of the family, make "shots" of your favorite haunts, your camping-trips, and countless other things that mean so much to you in later years.

People are taking their cameras to Europe with them, to bring back scenes that they will perhaps never actually see again.

While on the subject: a short time ago a vessel went to the bottom; and, of course, no record was made of it upon film. It happened, however, that a man on the rescue ship had with him a baby sub-camera of popular make, and he made pictures of the remains of the disaster through the port-hole of his cabin. He evidently is "hanging on" to the film—if it "came out"—for so far as I can find out, no news-reel has obtained it. Such a picture of an actual disaster would be a novelty, to say the least.

Another man obtained some fine film of a train-wreck—also with a sub outfit—in which he happened to be. This man, however, let it be known that he had such film of the wreck, whereupon he received a handsome sum for his trouble by having the film—destroyed, because of unpleasant publicity for the railroad.

So, as long as the kinema is to stay with us, why not get some of the pleasure out of it yourself? The sub-standard industry is making great strides, and it is difficult to tell where it will lead to. Now is your opportunity to begin in the "game", while it is young. Already the sub-standard film is being used commercially, a good omen for the future.

Also investigate the clubs that are being formed all over the country for amateur kinematographers. The benefits that such a nation-wide organisation can give you are many. Let's all get together for our mutual benefit.

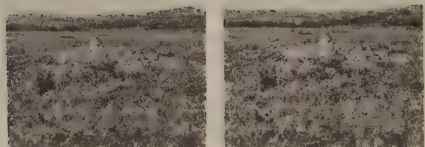
KARL A. BARLEBEN, JR.



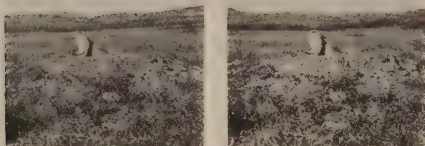
THE STEREOPHOTOGRAPHER



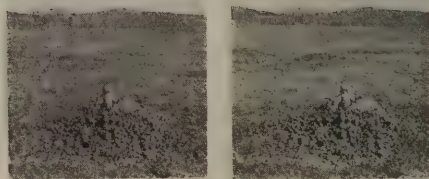
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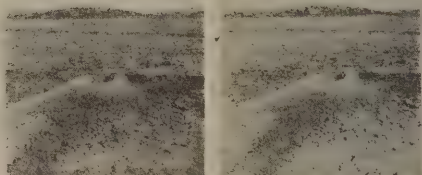
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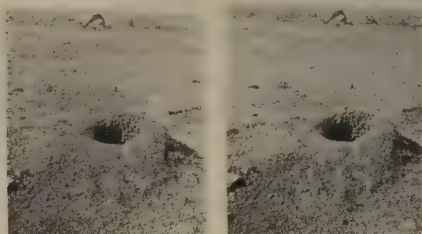
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FIGURES 1-6

F. L. GOLL

Stereophotographing the Prairie Dog

PHOTOGRAPHICALLY speaking, the notoriously shy Prairie Dog of our western plains is an interesting creature to shoot at! A sentry perched upon the rim of the crater of his burrow, with one sharp "squeek" announces your approach to the dog-town long before you are close enough to clearly see, let alone photograph, the miniature speed-hounds. So it did seem rather foolhardy to expect to get close-up stereophotographs of some of these hair-trigger rodents inhabiting the Wichita National Forest and Game Preserve in Oklahoma. However, with a strong determination I started early for the dog-town, taking a good stereo-camera and tripod. Of all dumb tricks toting a tripod along seemed to be the limit of absurdity, but it's a habit, so the tripod was taken and used.

They saw me coming. "Squeek!" I saw them going. Spotting one pretty fellow diving into a recently made hole, I determined to wait him out. Seventy-five feet or so from his mound this "watchful waiting" business began during which prolonged period it occurred to me that a lunch might have been more useful than the tripod. Prairie dogs bravely reappeared at distant hills to survey the situation and squeek information to other more timid members of the community. A head arose above the crest of my selected mound, but seeing me it quickly vanished. The intervals between its reappearance became shorter, likewise the distance between myself and that particular fellow was shorter every time his head came up for another look; and, strangely enough, the closer I got, the longer he stayed up to look me over. Possibly, mistaken identity led him to conclude, as I settled

down less than fifteen feet from his hole, that it was but a foolish jackass disturbing his peaceful pursuit of happiness, so he remained up barking disapproval at such persistent intrusion.

Funny how easy it was to photograph him then. Winding film, reloading the camera, getting up off my knees, talking to him and slowly executed movements now seemed to excite his curiosity. He posed quite a number of times, yet doggedly refused my repeated request that he "get out of that hole and sit up like a real dog."

F. L. GOLL.

Legends for Stereophotographic Illustrations

- (1) Just a peep to see what it was all about!
- (2) Barking his disapproval at the intruder.
- (3) Boldly inquisitive.
- (4) Beau Brummel of the dog-town. A handsome chap if one admires such beauty.
- (5) A well formed prairie dog mound suggests a miniature volcano crater.
- (6) The prairie dog uses its tough nose to firmly tamp the soil in building the inner wall of his burrow.

In the frame illustrated, which is for 45 x 107 mm. size, the end-stops are exactly $4\frac{1}{8}$ inches from the farthest edge of the masked opening. Thus the negatives, as well as the positive material extends over onto the black mask $1/16$ inch, leaving that margin at each end of the finished positive.

Figure 2 shows the frame, with guides and end-stops, and masked opening. Figure 1 shows a negative at one end and the paper-print at the other. After the one half is exposed in that manner, the frame is opened, the positions of the negative and paper changed, and the second half exposed the same length of time as the first.

Figure 2 also shows an extra piece of cardboard just the size of the masked opening, which has been glued to the platten or back of the frame. This is to give extra pressure over the printing-area in instances of use of thin paper for printing. For transparency-work it is not needed, unless the thickness of the guide-strips of cardboard exceed that of the combined negative and glass-transparency.

CHARLES FRANCIS HAMILTON.



FIGURES 1 AND 2

CHARLES FRANCIS HAMILTON

Transparencies from Stereo-negatives

I PRESUME that nearly every stereophotographer makes a few transparencies, at least. To do so necessitates use of a self-transposing printing-frame. Such frames, when bought from dealers in apparatus cost \$2.50 and up. Figures 1 and 2 show such a frame, home-made, constructed from a 50-cent 5 x 7 printing-frame.

Simply mask the entire glass, leaving in the exact center an opening for printing, the size of which is to be determined by the shape and size of each half of the stereo-negative. Then, with a print-trimmer or straight edge, cut a piece of card-board about $1/16$ inch thick, a half-inch wide, and full length of the frame or glass. Glue this to the glass about $1/16$ inch from one edge of the masked opening. Care must be exercised to have the edge of the opening and the edge of this cardboard parallel. Now another piece may be glued at the opposite side of the opening, its distance being regulated by the width of the negative. By laying a negative over the masked opening, it can readily be determined at what points to place the end-stops.

Cut-film and Stereo-cameras

IF economy were an issue, one might stress that idea as a reason to use cut-film, where the photographer's equipment will allow the substitution. Those stereoworkers who use a plate-magazine, can easily substitute cut-film for plates, by simple addition of a piece of thin cardboard cut to size of the plate-septum, to lie behind each film, keeping its surface at the focal plane. The economy lies, not in the mere use of the film, but in cutting it for oneself. My only plate price list gives the cost of 45 x 107 mm. plates at 65c. per dozen and the 6 x 13 cm. size at 10c. higher in price.

Now one sheet of cut-film, size 5 x 7 inches, cuts into four films 45 x 107 mm. in size, with a slight bit of waste, which figures that one dozen 5 x 7 will furnish four dozen 45 x 107 mm. stereo-negatives. The cost of the 5 x 7 film is \$1.50 per dozen, making the cost of the stereo-negatives average $37\frac{1}{2}$ c. a dozen. Compare that with the plate-price.

The 5 x 7 film will also cut up into three pieces 6 x 12.7 cm., which is slightly shorter, by one-eighth of an inch, than the standard 6 x 13 cm. plate; but this slight difference will not be of great importance.

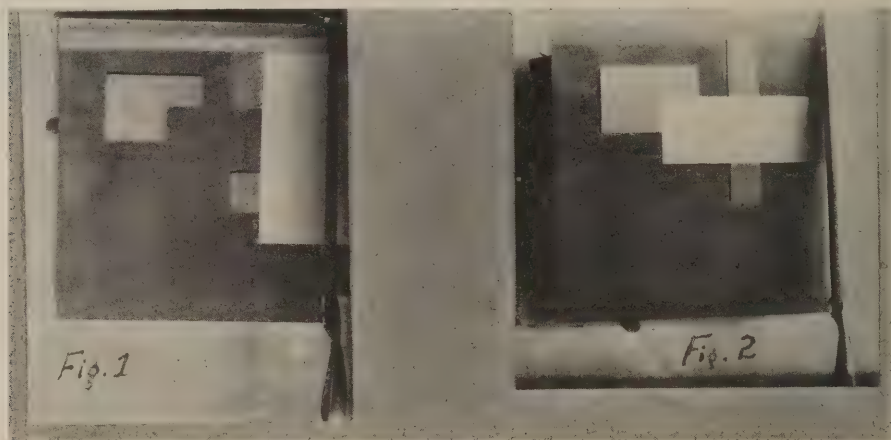
Although there are few of us who will not stoop to economy, if nothing of the quality is sacrificed, many are prone to follow the other man's lead; and, in this instance, it is to use plates for stereo-work because nearly every one has always used plates.

My advice is to break away, give the cut-film a good trial and, then judge by the results. For those who may be inclined to try cut-film, I submit two illustrations which show the manner in which my trimming-board has been arranged, to facilitate cutting the film to the required size. By this arrangement one can do the work by touch in absolute darkness, and in

The Price of Stereo-cameras

LET not any amateur who wishes to take up stereophotography be held back by the price of the popularly advertised stereo-instruments. There are very inexpensive models—also one may use two moderate-priced box Brownies as suggested by Mr. Grosdidier—and there are also used outfits to be obtained from recognised dealers or through the classified columns of the photographic magazines. I quote here in part from a gentleman and an amateur stereo-enthusiast of a foreign country:

"My camera is only one of the Richard Glyphoscopes



FIGURES 1 AND 2

CHARLES FRANCIS HAMILTON

such manner can cut up panchromatic film for use, as easily as any other.

Figure 1, shows a piece 45 mm. x 5 inches being cut off the end of a 5 x 7 inch film. Figure 2, shows the extra end—the wasted part—being trimmed from the piece, leaving the film the exact size necessary for the septum. The adjustment of the guides which are glued to the board, makes this operation certain in every instance.

This suggestion is practicable only for those stereophotographers who use plate-magazines. It might be possible to obtain septums for the plate-holders, such as the Eastman Kodak Company furnishes for its cameras; but I have never seen any advertised. If obtainable, they would, of course, make it likewise very easy to use cut-film in the single holders.

CHARLES FRANCIS HAMILTON.

Mary Pickford Is a Stereophotographer

THROUGH the courtesy of Mr. Albert E. Angier of Glendale, Calif., who sent us a clipping from the *Los Angeles Examiner*, we are able to inform readers of this department that no less a person than Mary Pickford herself has taken up stereophotography. The account in the clipping relates to the visit of several prominent people to Mary Pickford's studio and concludes with the information that, "the visitors posed on the studio-lawn at the request of Mary Pickford who wanted pictures of the group made with her new stereo-camera."

with meniscus achromatic lens. This is because I like stereoscopy and cannot afford to have a good camera . . . the main thing is to know the limitations of the outfit and not to attempt work that it cannot do."

Quite true, and the same advice has been given to amateurs for years. It is not the camera; but the man who uses it, that counts. This gentleman, with his moderate-priced camera gets results as satisfactory as one could obtain with the most expensive instrument, under the same conditions. Of course, the owner of the expensive stereo-camera can work where only failure would result for the other; but he knows it and makes no attempt to make his \$15 camera do what a \$300 camera ought to do. I know that his results are satisfactory, for I have exchanged views with him. Therefore, do not hesitate if you would take up stereophotography and have not \$100 or so, but buy what you can afford, use it according to its limitations, and enjoy stereophotography now.

Incidentally, recent correspondence from readers indicates that stereophotography is gaining ground steadily and that pictorialists, as well as average workers, are taking up this fascinating branch of photography in increasing numbers. In this connection we urge our readers to obtain the latest catalogs from Harold M. Bennett, R. J. Fitzsimons Corporation, O. H. Sampson, Motion-Picture Apparatus Company, Herbert & Huesgen Company, Eastman Kodak Company, Pinkham & Smith Company, Charles G. Willoughby, Abe Cohen's Exchange, Central Camera Company, and other dealers and manufacturers.



THE MILITARY PHOTOGRAPHER

CAPTAIN A. H. BEARDSLEY, SIGNAL—RES.



Getting Introduced to Aerial Photography

THE readers of this department will recall that last month I said that I was on my way to Chanute Field, Rantoul, Illinois, for my fifteen days' annual military duty. I wish that pressure of other matters—and the accumulated editorial work and correspondence—could have been swept aside and that I could have been free to write a report of the exceptional experience which I had at Chanute Field for this issue. However, I am at work on it now and the engraver is making some illustrations which will materially help the text.

It will not be anticipating too much for me to say that aerial photography has captured me. Thanks to the experienced Army Pilots with whom I flew and the splendid Fairchild Aerial K-3 Camera that I was given to use, I believe that no one ever received a better introduction to aerial photography than I did. It was an entirely new experience for me. Although I had been up a few hundred feet in a balloon, I had never experienced the rush and roar of a big D-H U. S. Army Photographic Plane nor reached an altitude in mid-summer when I became positively cold and shivering for lack of sufficient warm clothing. Then, too, I was extremely interested to see what effect the motion of the airplane would have upon me and whether or not I would suffer from the effects of nausea and dizziness. Let me say right here that the Air Service Officers who were my pilots were "officers and gentlemen". No doubt, it was in their power to make my first flights very unpleasant physically and mentally. However, they began gently, with the result that when I again set foot on the ground, after my first time up, I never felt better in my life and anticipated my next hop. Eventually, I grew accustomed to sharp banks, air-pockets, bumpy air and a tail-spin. In fact, toward the end of my tour of duty, I was thinking less of the plane, and what it was doing, than I was of trying my best to obtain well-composed oblique pictures or correct verticals. Incidentally, there is no such thing as taking plenty of time to compose a picture. About eight seconds is the limit in the air. In short, the pilot does his best to maneuver the plane so that the light-conditions and the elevation are right. He then slows down the engine, straightens out the plane and it is up to the photographer to release the shutter at exactly the right moment, taking into consideration the position of the plane, light, keeping the wing and tail out of the picture, having the horizon-line level, centering the principal object and making the exposure before the pilot is forced to "give her the gun" to reach a safer altitude. As if these things were not enough, there is very apt to be an air-pocket lurking about into which the plane will drop just as the shutter is released.

The Fairchild K-3 is very far from being a handy camera. The one I used was about three feet long and weighed, it seemed to me, about thirty pounds. To stand up in a plane and use this camera requires strength and agility, taking into consideration vibration, rush of air at ninety or a hundred miles an hour, roar of a twelve-cylinder Liberty engine, jumping of plane and effort to make good pictures. In my case, the camera was lashed into a frame fitted to the side of the plane

and this was of great assistance. This frame is now standard equipment for Army Photographic Planes.

I cannot say enough about the courtesy and kindness shown me by Major McCord, Commanding Officer at Chanute Field, the Director of The Photographic Department, Air Service Technical School and the Officer and enlisted personnel of the post. I was a stranger and they made me feel at home.

Five Minutes Enough for Aerial Photographs

Of real significance to aerial photography were the tests made in Rochester recently of a new process by which aerial pictures may be developed in flight within five minutes after exposure. The tests were made by Lieut. George W. Goddard of the Army Air Service and Dr. S. M. Burka, government physicist. Actual photographs of various city-buildings and streets were made, developed, and dried, in five minutes. This film has been developed by the Eastman Kodak Company in co-operation with the Army Air Service and, according to Dr. Burka, is the most far-reaching development in aerial photography yet made. A special film known as ana-positive is used; and, when developed it presents a positive on one side and on the other a negative from which ordinary prints can be made.

The film-base is permanently tinted a dark blue which transmits actinic light, but to the eye is substantially opaque, so that when developed the image is negative by transmitted light and positive by reflected light. A special developing-method or a bleaching-process is used to give a whitish appearance to the positive image.

Three tubes for developing, fixing and washing are installed in front of the observer's seat. Over these and the camera is placed a light-proof covering with two sleeves for the photographer's arms. These leave his hands free to make his exposures, and place the film successively in the three tubes. Drying is done in the air.

The value of this new achievement for war-reconnaissance can readily be seen. Heretofore, aerial photographers, after making exposures, have been obliged to return to their landing-place miles away and relay the undeveloped film to the nearest developing-base. By the new method the finished pictures can be dropped and the airplane continue its reconnaissance.

For peace-work, such as forestry or surveying—often remote from any laboratory-facilities—the new process gives opportunity to study detail and check photographic results on the spot.

Tests were also successfully made with a new reversible paper film, developed by the Eastman Kodak Company at the suggestion of the Army Air Service. This process yields an actual paper-print; and, in the tests made, finished pictures were dropped to the ground within seven minutes after exposure.

The Eastman laboratories, under the direction of Dr. C. E. Kenneth Mees, suggested to the Air Service the development of the reversible film which, in addition to a positive image, makes possible any number of prints from the negative. The advantage of this the government-experts quickly recognised and the tests just made have demonstrated its practicability.



LONDON LETTER

CARINE AND WILL CADBY



On the 9th of July, the Kodak Works at Wealdstone had a gala day, when the Duke of York, as President of the Industrial Welfare Society, visited the factory. The Duke started his tour of inspection by entering the Coating-Department where he was shown the huge ninety-inch-wide rolls of celluloid-silk being covered with sensitised emulsion, then being cut up into standard-sized pieces, rolled and packed. This is a process that no other visitor has been allowed to see, for it contains presumably trade-secrets that must not be divulged.

The Duke also had the amusing experience of seeing himself on the film; and in the private cinematograph-theater he was shown bits of his tour in Kenya with the Duchess of York. He was much interested at some of the scenes with her; one in particular, where, clad in hunting-breeches, she was explaining the intricacies of her rifle to some members of the party.

We are always rather proud of our Royal family because they live so close to their people and share their work, their worries and their pleasures. The Duke of York has been the Prince of the workers and knows as much about our industrial conditions as anyone in England, and his sympathies are always inclined to lean towards the under dog.

We are continually hearing of fresh instances that prove what an important and far-reaching influence the Co-operative Advertising Scheme has had on the general run of photographers. It has often happened that out of one failure can come another success. The activity that has been dammed up in one direction finds its way out in another. Steps are being taken towards a big affiliation scheme that is likely to prove a real help to our craft and to those working in its best interests. All over the country photographers have been coming together and forming local associations, and the new scheme is intended to link up these in some way with the National Association, so that they do not remain detached and out of touch with the rest of their confreres. Also new societies are springing up in many directions charged with all the enthusiasm of youth, and the idea of the Professional Photographers Association is that it shall act as a parent to them, welcoming their vitality and being ready, if the occasion demands, to offer a helping hand. Of course, the success of these associations will depend largely on the attractions and interest of the meetings, and the responsibility of getting up a really good program of lectures will be a heavy one for the local secretaries.

Have we as a nation become bird-worshippers? It seems almost like it, and if we ever go back to graven images it will certainly be a winged one at which we shall bend the knee. Of course, birds of all kinds have always held a fascination for English people; but since sanctuaries have been established, up and down the country, there seems to be no limit to our interest in, and devotion to them. Even the prosaic writers of this letter had their own little private bird sanctuary. Cats and dogs were rigorously excluded from the garden, bird-baths and food were supplied, and all went well 'till the peas began to ripen. Then our

appetites and affections sought opposite camps, and we dare not publish the result of the content!

But the interest in the subject must be very general, for its literature keeps growing, stimulated, no doubt, by the wonderful photographs by the past masters of the art of spying out and recording the birds' most secret habits and all the incidents of their daily life. The latest addition is by Canon C. E. Raven, "In Praise of Birds", a 14/-book with one hundred and forty photographic illustrations made in Holland and the United Kingdom. The Canon is an enthusiast on the subject; but as he has other work in life, his worship at the winged shrines was squeezed in during flying visits to the great sanctuaries. The photographs, which are beautifully reproduced, are of rather unequal merit and we think lack the consummate skill of our best-known workers in this direction.

A battle is being fought over the statue put up in memory of Hudson in the Bird Sanctuary in Hyde Park. His writings on nature are being widely read now, and his knowledge of birds is appreciated by the many modern bird-worshippers. Mr. Epstein was given the commission, on the advice of a committee of artists, to create a figure of "Rima" surrounded by birds. Unfortunately his representation of this heroine of Hudson's has not met with universal approval, and his figure has been called all sorts of uncomplimentary names, and there is a strong party urging her removal. The press has taken up the matter and letters have become heated and acrimonious. Indeed, the affair seems to promise us on this side of the water some of the thrills of the J. T. Scopes trial.

Mr. G. B. Shaw has now written to the *Times*, incidentally revealing that he keeps abreast of modern photographic developments. He says: "I have a great deal of sympathy with the people who hate Mr. Epstein's sample . . . Some of them do not like wall-sculpture, and are in the grievous position of people who want a fox-trot and have a Beethoven symphony thrust into their ears. Why should not these people have a monument and a bird-sanctuary all to themselves? It need not cost much. There is a process called photo-sculpture, with an establishment in the West-End, by which very pretty reliefs can be made by the camera. If Miss Fay Compton or Miss Gladys Cooper would pose as Rima, with a stuffed pigeon on each wrist, the artist who touches up the photo-sculpture could throw in a few shadows, a robin, and a holly branch: and the result would be exactly what is wanted by the honest folk whose sense of beauty is outraged and mocked by Mr. Epstein's powerful proceedings. Why not please everybody when it is so easy?"

Thus Mr. Shaw gives photo-sculpture a good advertisement, even if of a backhanded description, and like most of his ideas this one certainly contains a considerable leaven of truth; for no doubt there is a big public who would acclaim the literal fulfilment of his suggestion, stuffed pigeons and all, and be charmed with the result. But we must take a longer view and not deliberately provoke the hilarity and possibly scorn of future generations.



HERE, THERE AND EVERYWHERE

To ensure publication, announcements and reports should be sent in not later than the 5th of the preceding month.



The Result of Vacation Days—Little News

It is very evident that camera club secretaries go on vacations, just as other men and women do. In fact, during July and August there seems to be little doing among camera clubs in general, and secretaries cannot very well write lively camera club notes when there is nothing doing. However, when this issue reaches our readers, plans for the autumn and winter activities should be under consideration. We shall be very glad to publish programs of camera clubs just as soon as they have been decided upon, if the club-secretaries will give us the opportunity. In this connection, let it be understood that items for the September number cannot be included when mailed to us September 1st. It requires from four to six weeks to get out each issue of PHOTO-ERA MAGAZINE. Material for the October number should be in the mails on or before September 5. It is not our desire to omit one interesting item of news; but we cannot use it when it arrives—as if often does—after the magazine is all printed. It seems such a difficult matter to impress our readers with the fact that a magazine is not like a newspaper which is prepared and printed in a day. Therefore, if camera club secretaries will do their part, we shall be more than glad to do ours.

Forty-third Annual Convention of the Photographers' Association of America

WE are very glad to report that the Forty-third Annual Convention of the Photographers' Association of America held at the Public Auditorium, Cleveland, Ohio, July 27 to 31, 1925, was a splendid success and that those who attended and the manufacturers who exhibited were greatly pleased with the program and arrangements that were offered. This convention has become an event of national importance and each year the association is called upon to meet greater responsibilities and to win greater victories for professional photography in America. That it has won an enviable position among the great national associations of the country is in no small measure due to the excellent and efficient officers which have been elected from year to year to ensure the present high position held by the association.

E. H. Brown Gets His Name Into Print

OUR readers will recall the interesting and attractive photographic cross-word puzzle by William Ludlum which appeared on page 32 of our July, 1925, issue. In the same number we promised to publish the name of the reader who was successful in solving the puzzle. We take especial pleasure to announce that it was E. H. Brown, vice-president of the Associated Camera Club of America and author of the very valuable series of articles on camera clubs now appearing in our pages. Incidentally, we urge our readers to follow these articles carefully, for Mr. Brown knows his subject well and is eminently qualified to help new and old camera clubs to greater success.

The New Imperial Handbook, 1925

WE are very sure that our readers will avail themselves of the opportunity to obtain a copy of the new "Imperial Handbook, 1925". There are many helpful photographic articles in the book and a number of interesting illustrations. Although the text is addressed particularly to users of Imperial Dry Plates, there is much which will be of value to all photographers. Copies may be obtained from dealers or by writing a postcard direct to the Imperial Dry Plate Company, Ltd., Cricklewood, London, N.W. 2, England.

Protect Chocorua

Mr. JAMES T. TROWBRIDGE, who perpetuates a name once dear to all boy-readers and to many grown-ups as well, has issued an appeal to stay a proposed disfigurement of the greatest single mass of living rock in New Hampshire.

A fire-tower is to be erected upon the crown of Chocorua's lofty head of stone, unless heed be given to the protest excited by the news that this excrescence is to mar the mountain's calm and noble presence. The stark simplicity of the lofty forehead seamed as by the brooding of an immeasurable succession of centuries is to be blemished by an excrescence rising on the great dome in the form of a thin-sparred gangling tower as out of proportion and as odious as a daddy-longlegs on the forehead of a handsome woman.

Chocorua should not be disfigured. Whether it is the hues of the rock or the way the facets of its rugose surface catch and cast back the light of the sun, Chocorua is the jewel of our mountains. It is a wonderful sight at dawn seen from a distance to the east, and a still more wonderful sight seen from a distance to the west at the end of afternoon, when its splendor dies more slowly as there fall on it the last level rays full of the rosy radiance of the day's decline. Then it stands there at the right of the file of sentinels that stretch along Asquam and beyond, the second greatest wonder of New Hampshire.—*Manchester Union*.

Street-Scenes with the Amateur Kinematograph Camera

STREET-SUBJECTS are always an interesting problem for the amateur owner of a kinematograph camera. The scene of operation should be carefully inspected beforehand, both in regard to the lighting at different times of day and with the object of discovering the most effective viewpoint.

The viewpoint ought to command a vista, rather than look across the street at right angles. Pictorial principles of this kind are the same for the kinematograph camera as for the ordinary one; besides, the entrance and exit of pedestrians and vehicles is jerky, ugly, and trying to the audience's eyes, if abrupt and across the line of vision, whereas a view along the diminishing perspective of a street may be artistically restful, however crowded the street is.

In practice the beginner will find it almost impossible

to operate his kinematograph camera at pavement-level in a crowded street—and an empty street has no motion-value, and therefore is not worth a film. But even when a view down a street is wanted, with a long perspective vista, it is generally possible to find some building which has a window commanding the desired outlook. For ordinary street-subjects, illustrating natural city-life, the window should not be too high. A very lofty window gives an amusing effect of beetle-like dwarfedness to the passing people and vehicles, but the angle of vision, looking steeply downwards, causes an outward slope of the adjacent architecture, and this, though endurable once in a while, becomes curiously tiresome if repeated often.

A first or second-floor window is, for average subjects, the best. When the searcher has "spotted" such a window, he will generally find that its owner will not be in the least offended if he asks for permission to use it for a minute or two, some sunny day. People are always amiably interested in the doings of the kinematographer, and few city-offices are so busy that they will not permit a momentary intrusion for the purposes of picture-making.

Given the freedom of the window, the kinematographer ought to be able to make a good picture without being disturbed and without attracting public attention—two facilities virtually unobtainable in pavement-level work. But he must select his window judiciously in advance of the request to use it. Nothing is more annoying than to find, when one has given people trouble, and got to the desired window, that the view from it is half obscured—as far as the camera is concerned—by some hanging sign, jutting flagstaff, or cornice.

The exact view which will be seen from the proposed window can be gauged beforehand by the kinematographer if he will walk along the street keeping an eye on the window, first walking towards it on one side of the street and then walking towards it on the other. In fact, if he puts himself in the place of the passing crowd who will constitute his subjects, at the same time observing accurately the spot where the kinematograph camera is to be, he will soon notice if the project is impracticable because the window does not command so clear a view as a first glance at it had led him to believe. In the same way a good pitch may be found.

B. G. KENT in *The Amateur Photographer*.

The Prevention of Blisters on Prints

IN the district in which the writer happens to live, the water supply is very "soft". In winter this gives rise to no trouble whatever, but in summer there is a great tendency for prints to contract numerous blisters during the washing-process. After having experienced this effect with several makes of paper, it was decided that the only way out of the difficulty lay in hardening the prints—very preferably by means of a solution which would both harden and fix at the same time. By the way, it has occasionally been stated that in this country hardening solutions are unnecessary. But photographers who hold to this view can have had few hot-weather experiences with a really "soft" water-supply, or else they would express themselves otherwise.

Various fixing-solutions containing formaline and chrome alum were quite effective in preventing blisters, but were very inconvenient in use owing to the early formation of precipitates. The formula which gave by far the greatest satisfaction was on the lines of the acetic-sulphite-alum combination which is recommended for the Kodak and other papers.

In the writer's method of compounding this formula,

an "Acid Solution" is first prepared, the ingredients being dissolved in the order given, thus:—

Soda sulphite cryst	1/4 oz.
Glacial acetic acid	1 1/2 drs.
Powdered alum	1/4 oz.
Water, cool, to	5 ozs.

The working-solution is then made up as follows:—

Stock 50 per cent. hypo-solution	11 ozs.
Water, cool	11 ozs.
Acid solution (as above)	5 ozs.

The solution should be clear.

Of the many slightly different ways of compounding the formula, the foregoing is one of the simplest. The use of a somewhat larger quantity of water than usual in the acid-solution facilitates preparation, and avoids all necessity for the use of warm water, which is undesirable.

When the fixing-solution becomes turbid, throw it away and replace it with a fresh mixing. Overworking of this fixer-hardener is particularly to be avoided. If the prints can be well rinsed prior to fixing, the bath will keep clear much longer.

It will be as well to inform the reader as to the rationale of the process whereby the above fixer-hardener is so exceedingly effective in preventing blistered prints. We will first take a glance at the causes of blistering.

Blisters, in the writer's experience, seldom occur during development, or fixing, presumably because the gelatine-coating of the print does not swell in such concentrated solutions to the same extent as it does in plain water. As soon as the (unhardened) print is immersed in the washing-water, however, the gelatine-film begins to swell and to stretch. This, of course entails a considerable strain upon the paper-base, which finally loses cohesion and puckers up into a series of blisters. Hence, the blisters are in the paper, and not in the gelatine, although it is the swelling and stretching of the latter which gives rise to them. Blistering is most troublesome with a "soft" water supply, probably because gelatine swells more readily in such water than it does in "hard". When the gelatine-coating is swollen with water, the cohesion of the fibres of the paper is weakened, and consequently any local strain, such as may be caused through the falling of water from a height upon the print, is likely to raise a blister in the affected spot.

Blisters in the gelatine of prints *may* occur; but personally the writer has never met with them. The nature of the blister can be easily ascertained by cutting it open and examining the inner surfaces. If, as is usual, both the inner surfaces are white, the blister is in the paper-base.

By the use of a fixer-hardener, swelling of the gelatine is to a large extent prevented. There is therefore no undue straining of the paper-base, and hence, also, no blisters!

By the way, in order to anticipate future criticism, it is as well to admit that there may conceivably be certain kinds of blisters which cannot be prevented by hardening. Such blisters might be caused through the use of an excessively alkaline developer and an excessively acid fixing-solution, resulting, as soon as the print is immersed in the latter, in a sudden evolution of gas within the pores of the base. Yet another kind might arise from the use of an excessively concentrated hypo-bath, with consequent *osmotic* straining of the print as soon as washing is commenced. Blisters, however, arising quite independently of softening of the gelatine must be very exceptional, as the writer

has never met with a single blister when the above fixer-hardener has been employed.

In this year's "B. J." Almanac, page 280, it is stated that paper-base blisters may be prevented by the addition to the fixing-bath of a quantity of Epsom salts (magnesium sulphate), in the proportion of half an ounce of the latter to one pint of the former. The writer has never had occasion to make use of this expedient, and cannot say whether it would be effective in his case. In any event, the method can hardly present the incidental advantages, such as the rapid drying of negatives, for instance, which attach to the use of a proper fixer-hardener.

J. SOUTHWORTH in *The British Journal*.

Hard Problem

AN American in dear old London was bragging about his automobile. He ended his eulogy by declaring: "It runs so smoothly that you can't feel it, so quietly you can't hear it, has such perfect ignition you can't smell it, and as for speed—boy! you can't see it."

"But, my word, old dear," interrupted the Briton, anxiously, "how do you know the bally thing is there?"

Blue Baboon.

COMING EXHIBITIONS

AUGUST 29 to SEPTEMBER 26, 1925. The Second Midland Salon of Photography to be held in the Art Gallery, Birmingham, England. All particulars and entry-forms may be obtained from the Honorable Secretary, Capt. F. C. T. Hadley, Houndsfield, Hollywood, Birmingham.

SEPTEMBER 14 to SATURDAY, OCTOBER 24, 1925. Seventieth Annual Exhibition of the Royal Photographic Society of Great Britain, 35 Russell Square, London W.C. 1, England. Last day for receiving prints Friday, August 14. We have entry-forms and shall be glad to mail them as long as they last, to any readers who will send two cents in stamps for postage.

NOVEMBER 1, 1925. New Zealand Photographic Salon, Dunedin, under the auspices of the Arts Committee of the New Zealand and South Seas International Exhibition, 1925-26. The Salon will be housed in a specially equipped building. Last day for receiving prints, October 15, 1925. Entry-forms may be obtained from the High Commissioner for New Zealand, 413-5 Strand, London W.C. 2, England, or from H. M. British Trade Commissioner, 285 Beaver Hall Hill, Montreal, Canada. We have a few entry-forms which we shall be glad to send to any of our readers.

DECEMBER 19, 1925 to JANUARY 10, 1926, inclusive. First Italian Salon of International Photography, Turin, Italy, under the auspices of the Gruppo Piemontese per La Fotografica Artistica and of the Societa Fotografica Subalpino at the Galleria Centrale d'Arte, via Pon. 4, Turin. Last day for receiving prints is November 15, 1925.

DECEMBER 1, 1925. Maryland State-Wide Photographic Competition under the auspices of The Photographic Club of Baltimore City, 105 West Franklin Street, Baltimore, Md. Last day for receiving prints December 1, 1925. This competition is open to any amateur who resides in the state of Maryland, and all members of the Photographic Club of Baltimore. Further particulars may be obtained from The Print Director of the club.

THE PICTURE-MARKET

There is a market for every good photograph. The amateur and the professional photographer have the opportunity to sell good pictures and to derive financial benefits from their camera-work. To make this department accurate and reliable we have requested and obtained the hearty co-operation of the editors. We make no claim to publish a complete list of the market, each month; but the names of magazines that appear below we know to be reliable and in the market for photographs at the time of going to press. We have obtained our information direct from the editors themselves.

New York Times, Mid-Week Pictorial, and Wide World Photo Service, 229 West 43d St., New York City, N.Y.

Charles M. Graves, Art Editor. Wants news photographs. Size unimportant. Glossy prints desired. As little descriptive matter as possible wanted. Pays for accepted prints; *New York Times*, \$10; *Mid-Week Pictorial*, \$5 per print; *Wide World Photos*, \$3 per print, on acceptance.

House and Garden, 19 West 44th St., New York City, N.Y. Heyworth Campbell, Art Editor. Wants photographs of houses, interiors and gardens. Size 5 x 8, glossy. Needs about twenty-five words of descriptive matter. Write the magazine as to its requirements before submitting prints. Pays \$3 to \$5 each print, on acceptance.

American Farming, 537 South Dearborn St., Chicago. Paul Stephens, Art Editor. Wants agricultural photographs. Size, 5 x 7 inches. Cover pictures, 10 x 12 inches. Glossy prints wanted. A good story will help sell the picture. Stories must be current. Better write the editor before submitting pictures. Pays from 50 cents to \$15, on bills rendered. Editor writes: "We do not want freaks. Pictures must exemplify good agricultural or domestic economic practices. Farm machinery (tractors, threshers, etc.) can be secured from the manufacturers, and good roads pictures from cement associations, free."

L. B. Carlson, 3015-47 Avenue South, Minneapolis, Minn., reports that he is in the market to purchase news-photographs, unmounted glossy prints not smaller than 4 x 6. He prefers 8 x 10 or larger of interesting news-events and pictorial views. Price paid is \$3.00 and upward, depending upon news-value and exclusiveness. All unacceptable prints are returned. Mr. Carlson has connections with seventy newspapers in the United States and Canada.

The World's Work, Garden City, N.Y. R. T. Townsend, Art Editor. Wants pictures of people prominent in the news. Size 8 x 10, glossy. Enough descriptive matter to serve in writing short captions. Write the Editor regarding the requirements of the magazine before submitting pictures. Pays \$1 to \$3 for pictures, on acceptance.

The Farmer, 59 East 10th St., St. Paul, Minn. Berry H. Akers, Art Editor. Wants human interest pictures pertaining exclusively to farm life and farm scenes adapted to the Northwest. Any size. Cover pictures 5 x 7, or in that proportion. Glossy prints wanted. Enough descriptive matter for a caption needed. Price paid depends on the print.

Picture and Gift Journal, 537 South Dearborn St., Chicago, W. W. Raleigh, Art Editor. Any size photographs of interiors and exteriors of picture-frame and art-stores. Descriptive matter to accompany photograph. Pays \$1 to \$3 on acceptance.



THE PUBLISHER'S CORNER



If This Issue Is Late

If this issue of PHOTO-ERA MAGAZINE arrives late this month it is all my fault. No one else is to blame. My absence of two weeks at Chanute Field, Rantoul, Illinois, on military duty and the large number of visitors at our office, since my return, has had its effect on the amount of work that I could do these past few weeks. However, in due course, when I give an illustrated account of my introduction to aerial photography, I believe that my readers will not judge me too harshly.

Then, too, when subscribers from all over the country and Canada make a special trip to the home of PHOTO-ERA MAGAZINE at Wolfeboro to meet the Publisher personally, I am sure that my readers will admit that the least I can do is to give these good friends a hearty welcome and enjoy the pleasure of meeting those with whom I have been corresponding for a number of years. It is this friendly contact with my readers which makes the magazine more than just another photographic journal. When I know that some of my visitors have come forty—yes a hundred miles—out of their way to call, I realise what it is to have such interest and support. It means more to me than I can express in words. In the circumstances, I am sure that the tardiness of this issue will be excused.

When East Didn't Meet West

MANY weeks ago my good friend Sigismund Blumann, Editor of *Camera Craft*, San Francisco, made an appointment with me and I was anticipating the keen pleasure of again grasping his hand in mine. There were many things that we were going to talk over which I believe would have resulted to the benefit of the readers of our respective publications. The evening before the appointed day for our meeting, I received a telegram in which Mr. Blumann stated that unavoidable circumstances prevented his keeping the engagement with me in Boston. Needless to say, I was greatly disappointed, as was he; but perhaps, the next time I'll go west and we'll have better luck. Mr. Blumann has had a splendid trip through the east and may he return to the Golden Gate refreshed in body and happy in the knowledge that he has many friends in this part of the country.

It Is up to the Camera Clubs

In the series of articles now running on organising and maintaining a camera club, by E. H. Brown, vice-president of the Associated Camera Clubs of America, the point is made that much of the success of a camera club depends upon publicity, exhibitions and club-participation in outside activities. The announcement repeated in this issue with regard to the PHOTO-ERA TROPHY CUP should help camera-club members to keep up their interest and give publicity to their organisation. Now that the vacation-season is over, I hope that camera-club officers will give serious consideration to the offer made by PHOTO-ERA MAGAZINE and encourage members to participate in our competitions. It is up to the camera clubs to help make this plan a success.

An Important Correction

In the article, "Something about Sulphite" by J. R. Hall, in the July, 1925, issue, top line, second column, page 14, appeared an error which we hasten to correct. The item reads "1½ ounces of pure concentrated hydrochloric acid". It should read "one half ounce of hydrochloric acid". We ask those of our readers who may have had unsatisfactory results, due to this error, to try again, and we believe that they will find that Mr. Hall's suggestions will prove to be entirely practical and satisfactory.

Charles Francis Hamilton

WE were shocked to learn of the death, on August 1, of Charles Francis Hamilton who has become well known to readers of PHOTO-ERA MAGAZINE during recent years. He was an enthusiastic stereophotographer and in this branch of photography he became especially proficient. Mr. Hamilton carried on his work under adverse conditions. He was a veteran of the World War and a "casualty," due to his being gassed while in action. His lungs were seriously injured; and, in the hope of healing the damage done them, he moved to Arizona. Unfortunately, his strength was not equal to the demand made upon it. We are sure that our readers join us in our expression of deep sympathy to his relatives and friends; and may we all remember, as we read his contributions in this issue, that he gave his life to defend the country and the flag we love.

Interest Increasing in Amateur Kinematography

A YEAR or two ago, some readers questioned the advisability of PHOTO-ERA MAGAZINE devoting a department to amateur motion-pictures and publishing articles on the subject. Like all pioneers, we had to face such questioning; but today we have the distinction of being the first photographic magazine in the United States to have a regular department on the subject and the first one to give much publicity to this new branch of photography. We hope that others will follow our lead and help to make known the attractiveness of photography in motion as now made possible by a number of excellent amateur equipments at a reasonable price.

Book Reviews and Other Items

OWING to accumulated correspondence and the great amount of editorial work awaiting my attention upon my return to my desk, a number of book-reviews and other items could not be prepared in time for this issue. Among the book-reviews of special interest is the one of Towle's new book "Portrait Lightings". This, and several others, will appear in the October number.

The past few weeks have been tremendously active and filled with benefit and the pleasure of meeting new friends and trying to absorb new ideas. The clear, crisp autumn days will soon be here and then it will not take long to get back to the office routine and turn out the required amount of correspondence, editorial work and criticisms.



COLLECTOR'S CORNER

L. J. CREEGAN

HONORABLE MENTION—FRONT-COVER ILLUSTRATIONS



PHOTO-ERA MAGAZINE

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The New Era in Photography

KARL A. BARLEBEN, Jr.



NEW era has dawned in the photographic field. I refer to the motion-picture. True, we have had motion-pictures for some time now, but it is only in the last few years that the amateur has taken up this fascinating branch of photography; for years ago the kinema outfit, besides being very costly, was heavy and big, therefore none but professional motion-picture men used it. Now, however, there are several motion cameras on the market made for the amateur's use only. These employ what is known as "sub-standard" film, instead of the regular standard film which is used professionally. With the birth of these "baby" outfits, the cost is reduced to almost nothing—in comparison with the standard outfit—and so is the size. These two factors alone appeal to the amateur, and he has responded. Not that we have discarded the still camera, for that will be useful to us always; but for a change, the kinema camera is fast becoming popular.

Mr. Pictorialist, who has used his still-camera for years, is finally induced to try a motion camera. He goes to his favorite haunts and makes his exposures. A week later, he gets his film back from the laboratory and screens it to see what it is all about. On his small screen in his home there appears a beautiful scene. Composition and all is there. But he notices one difference. He sees that little brook bubbling down, splashing upon rocks and leaving tiny whirlpools in its wake. The trees above sway with the wind, the leaves are in action, and behind them, the clouds roll by. Mr. Pictorialist was not used to this, and he enjoyed it. Not only did he have a picture, but also action.

Mr. Sportsman also got the fever. He took with him on his trips a baby motion-picture outfit. His habit had been to take along a still camera with a fast shutter and lens, but his results were far from satisfactory. So on the

advice of one who knew, he equipped his new camera with a telephoto-lens and a slow-motion attachment. Thus armed, he went forth. His first trial was with animals. So he went out to the country, selected a spot from which he could observe nature and not be observed himself. Finally, he was rewarded by having some of nature's children come into view. He had already focused his camera, so all he had to do now was to expose. He tried normal and slow speeds.

When the film came back, he was surprised at the results. There before him appeared his animal friends, close to,—although in reality they were quite a distance away. On his screen were animals that walked and acted naturally; then the slow motion scenes "came on". Here was something novel. The action of the animals was slowed down several times, showing in detail each and every motion the animals made. This was a bit better than a lifeless print, which was usually blurred, due to the swiftness of the animal's movements.

From then on, Mr. Sportsman carried his outfit to all scenes of activity,—base-ball, swimming, yachting, camping, and what not. He discovered that for his line of photographic pursuits the motion camera was "the only thing". He also learned that athletes can gain much through the medium of the slow-motion camera, for the camera often sees faults in action that the eye overlooks entirely. Naturally, when action is slowed down and then viewed, every defect is plainly visible.

There is another type of photographer, who photographs nothing else but his friends and family. He, too, is benefited by the kinema. He used to "set his victims up against a wall and shoot them". Now he can "get" them in action, as they really are. No more forced, strained expressions. In making a family record, he is doing something worth while, for such records

become priceless as the years go by. It is the usual custom to snap "baby" from his earliest moments up to the time he becomes a "man". The popular thing to do is to snap him on every birthday. This way will keep the record up to date at certain intervals, and show the progress made each year. When "baby" gets married, he will have something to show his children, and so on. Such a record of still-pictures is satisfactory in a way, but it cannot show mannerisms, expressions and actions as can the motion picture. And these things are what we want to keep as a record. We all know more or less what we looked like years ago; but actions change with time, and therefore the kinema is the only medium with which we can make a *complete* record.

Then, there is always an opportunity for the amateur to earn a few dollars with his outfit, if he knows how and where to look. And it seems to me that the day is not very far off when the sub-standard camera will be used commercially. Already, now, some people are specialising in

commercial work with the sub-outfit. New attachments are being added day by day, and soon we shall have a sub-camera that will be as complete as our professional outfits, and therefore will be equipped to do high-grade professional work.

Already we can have a change of lenses at a moment's notice. We can have slow motion at the turn of a button. Irises can be made by hand by anyone who is handy with tools.

So, after all, what excuse have you for not owning a motion-camera? Get one at your earliest convenience, use it, boost it, and get in touch with some reliable amateur kinema club, and see how you can be benefited by so doing. Read the motion-picture department of PHOTO-ERA MAGAZINE (The Amateur Kinematographer) and keep well posted and informed of what is going on around you. Once you get interested, it is certain that you will be a life-member. The field is young, and as yet uncrowded. Get in before the rush begins. Grow up with it. You cannot but like it.

The Seattle Camera Club

DR. K. KOIKE



WHETHER or not photography is an art is no longer a question, but what a pictorial photograph is, is a question yet left to our consideration. We must by no means use the camera merely for our amusement, but must through its use open a new way in the photographic world. How, then, are we to do this? Certainly we must find the right course and steer straight towards the right goal. We must study hard and do our best. But, unfortunately, in Seattle we have not a good pilot. Consequently there is only one thing for us to do: to hold meetings for the purpose of discussing photographic subjects.

We waited patiently for a long time, thinking that some Americans might organise a society for the friends of photography, but no light appeared on the dark sea. At last we Japanese determined to establish one by ourselves, and the result is the Seattle Camera Club. I cannot anticipate what the future of our organisation will be; that is a puzzle which time will solve.

Well, give me some time to consider whether or not Seattle is a suitable place for pictorial photographers. Seattle is situated in the state of Washington, a wonderful timberland, in the

Northwestern part of the United States. There are many changes in the climate during the year. We are able to find spring flowers and snow-scenes. Even in short trips of a few days, there are many famous high mountains and peaks or numerous lakes.

You know Mt. Rainier is one of the best national parks. By the way, I will tell you how to observe the holy mountain which old Indians worshiped as a god. By auto you will easily reach the front entrance of the park and then to Paradise Valley passing by Longmire; but the place is too popular for the average photographer. Go to Reflection Lake, cross over Mazama Ridge and perhaps you will find something attractive; or hike to Indian Henry's Hunting Ground, leaving your car at Longmire, and then an inspiration will come to you. If you wish to see the great mountain from another point, visit the White River Camp, from where you may go to either Yakima Park, Glacier Basin or Summerland. Still one more trail should lead you from Fairfax to Carbon River.

The harder a trip, the better pictures. I have no space to explain the details to you in this case; but I wish to be given an opportunity by the Editor's favor some time later.



THE MOUNTAINEER
R. AZUMA
SEATTLE CAMERA CLUB



SUNLIT PORCH

Y. MORINAGA

SEATTLE CAMERA CLUB

Monte Cristo is called the Switzerland of America and it is a forbidden country to the motorists. Mt. Baker, Mt. Adams and Mt. St. Helen's are other snow-capped mountains. Sunset Highway and Index Valley are the fairylands for the pictorial photographers.

Snoqualmie Falls are only second to Niagara Falls. Lake Washington is the largest lake in the state and is encircled by a boulevard which has many splendid points from which to view the beautiful scenery. There is American Lake, Spanaway Lake and Steilacoom Lake near Tacoma. Moreover, we are able to find many beautiful marine-pictures everywhere in Puget Sound. Even within the limits of the city, we can find some good subjects when we are careful to search the hidden treasure from the sand-bed.

In short, there are plenty of subjects for pictorial landscape-photographers there. The only reason that there were but a few pictorial

photographers in Seattle, the people lived among wonderful surroundings; but there was no leader to awaken the average person from his long sleep and it is our mission to open the new route.

The purpose of the Seattle Camera Club is "to promote, foster and advance by every honorable means, Photographic Art". Our intention is to make our work as pictorial as possible. Some of our members are making their names known in pictorial photographic circles throughout the world.

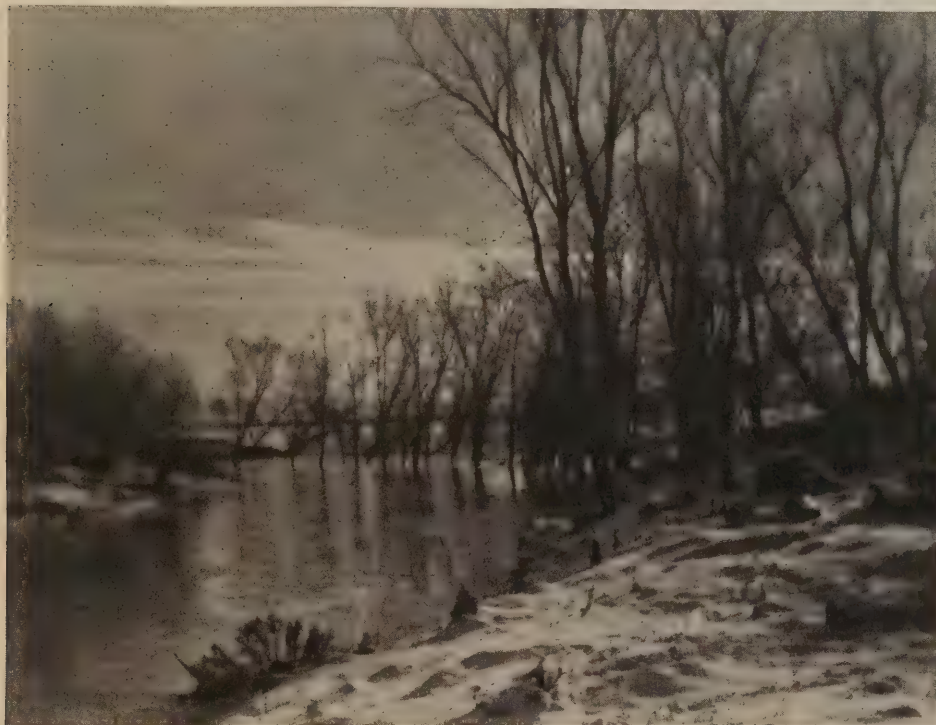
Personally Mr. F. Y. Ogasawara is one of our non-resident members and the only Honorable Life Member of the Oregon Camera Club, Portland, Oregon. And Mr. F. A. Kunishige is a good worker in figure and nude-studies, Mr. H. Onishi and Mr. H. Kira show us their ability in landscape-subjects. Mr. Y. Morinaga is active in the leading magazine-contests.

Mr. S. Hirano, Mr. S. Horino, Mr. R. Morita, Mr. S. Tada and Mr. S. Takayoshi's works are accepted very often in this magazine, as you know. On the American side, there is Miss Ella E. McBride whose pictures are popular in both this country and abroad.

During the beginning of the year 1925, the work of our members showed some high percentage in the leading salons and we are expecting to hold this good record as long as possible.

Of course, most of the members are only

the contributors are Japanese, but there is no limitation and our gate is always wide-open for everybody. If some Americans or others intend to tell their opinions to us, we will listen to them with much pleasure. Moreover we are planning to invite lecturers on various arts. Already Professor Glenn Hughes of the University of Washington has spoken before us on modern tendencies in stage-design, using slides for illustration. At another time, the Northwestern Photo-Supply Company of Seattle gave us a



WINTER-LANDSCAPE

SEATTLE CAMERA CLUB

HIROMU KIRA

beginners; but I can still count some workers of high promise. They are trying to learn from their seniors, and to raise their work to a high level. I have hope that they will accomplish important things when they reach that level.

We hold a monthly meeting to exhibit the work of members, and to discuss photographic matters. We plan to show our prints to the public once or twice a year with the idea of teaching them to understand this art. We will publish our official monthly bulletin named "Notan", the contents being not only photographic subjects but art and letters. Most of

demonstration of many splendid natural color-plates. Most of the subjects were flowers, clouds and landscapes, and we lost ourselves in the charmed land for a while. Mr. Anderson told us about the theory of lens. And Mr. Tobey, an instructor in the Conish School, explained to us the principle of the modernism of painting, and Mr. Basuke Yamada showed us his water-color-paintings much influenced by the old Japanese genre-pictures.

In the future we shall have more such lectures, for we find them very helpful in our development.

At present, our membership is a little more

than fifty, five of them being Americans; but I am sure that we will add more very soon. Most of the members thus far are Japanese living in Seattle and vicinity; but I eagerly desire Americans to help us, or to co-operate through the societies which they themselves may sooner or later organise.

During the past few years, Frederick & Nelson, the largest department-store in the city, has

At first, photographers tried merely to record their subjects, but later some of them began to make their work pictorial. Painting proved very helpful in making this advance and we are still under its influence.

We Japanese must, of course, work within the limit of Japanese ideas, and our art is decorative, suggestive and poetic. Do you know the old Japanese designs by Korin Ogata who left



WILD WEST

SEATTLE CAMERA CLUB

S. TADA

held its annual photographic exhibitions and it gave us the opportunity to see the works of the famous pictorialists all over the world. It is very helpful and stimulates the average photographers; but I am sorry that the contributors from Seattle offer the poorest work in the exhibition.

It is not a rootless conclusion, but a real fact comparing their works to the others. In this case, our destination is far away and we must walk steadily and straight toward the right mark.

I shall now take the liberty of telling you a little about Japanese art. Photography and painting differ from each other in the matter of composition and the expression of atmosphere but at the same time they have similar points.

us his good examples how to handle the subjects and how to make them decorative? The school of Japanese "sumie" tries to express the ideas by "notan" only using Indian ink, but without coloring. They sometimes ignore the shade and shadows apparently. They show us the outlines only, leaving the details to our imaginations. Japanese poems have a similar tendency, being in form very short and we are influenced from them in the same degree. Our art and literature make our people habitual in cleanliness.

Arthur W. Dow says in his "Composition" that "The Japanese knew no division into Representative and Decorative; they thought of painting as the art of rhythm and harmony, in which modeling and nature-imitation are subordinate"; or as Adrian Stokes tells in his



THE BELIEVER

F. A. KUNISHIGE

SEATTLE CAMERA CLUB

book "Landscape Painting;" "Then, again, consider a Japanese print by one of the best artists. It is not at all correct, perhaps; but note the long sweeping curves, their relation to one another and to straight lines, and their peculiar grace and charm. It is a form of obstruction in which the artist, without trying exactly to copy nature, and with the least possible means, endeavours to convey his message".

They recognised some strong points of Japanese art, but there is another group of critics. Some foreigners do not understand Japanese ideas, and reach wrong conclusions. I am sorry if they mislead others. I wish those critics would not be so hasty, but would listen to, "About Faces in Japanese Art", by Lafcadio Hearn: "Perhaps somebody will say that, even granting my assertion, the meaning of any true art should need no interpretation, and that

the inferior character of Japanese work is proved by the admission that its meaning is not universally recognisable. Whenever one makes such a criticism he must imagine Western art to be everywhere equally intelligible. Some of it—the very best—probably is; and some of Japanese art also is. But I can assure the reader that the ordinary art of Western book illustration or magazine-engraving is just as incomprehensible to Japanese as Japanese drawings are to Europeans who have never seen Japan. For a Japanese to understand our common engravings, he must have lived abroad. For an Occidental to perceive the truth, or the beauty, or the humor of Japanese drawing, he must know the life which those drawings reflect".

He gave his opinion this way, based on the figures and the composition of our landscapes which show a similar tendency. We are very



THE WHITE TEMPLE

S. HATSUKAMI

SEATTLE CAMERA CLUB

peculiar in the arrangement of our subjects. Of course, I am not so narrowminded as to object to the foreigner's work without reason; but I see too often some careless compositions by them even after they have been accepted by leading salons. If they learn something about Japanese art, perhaps there will be a great improvement and it should make good for the advance of the photographic art. That is my opinion.

When you make your pictures, you will consider first how to arrange the subjects in good order. Skilful technique can help no bad composition and there is no way to express the atmosphere correctly. I know the Japanese idea is not the only way to save the heedless photographers, but at least it is one of many ways.

Now we are all Japanese living in America. You see it is clear what the members of the Seattle Camera Club should do for the advancement of photographic art. Yes, we must be the best interpreters for both nations, because we are not free of Japanese ideas, and yet at the

same time we understand Western ways. We should not make our pictures aimlessly, but must try hard to combine both ideas, in other words stick to our peculiar point of view. To add something new and valuable to the photographic circle is not a bad plan, I suppose. I am sure that the Japanese conception will be given a position in photographic circles some day.

Now look over the works of the Seattle Camera Club's members, Japanese, and find what I told you. If they do not show you anything special, give us time and let us try our best again and again.

In conclusion, I thank the editors of PHOTO-ERA MAGAZINE for welcoming the birth of our Seattle Camera Club, and for giving us the opportunity to tell its readers about our aims and accomplishments.

[We take this opportunity to invite other new, and old, camera clubs to give an account of their organisation, growth and activities. We can all profit by a series of similar interesting and helpful articles. EDITOR.]



THE RAINY DAY

ALFONS WEBER

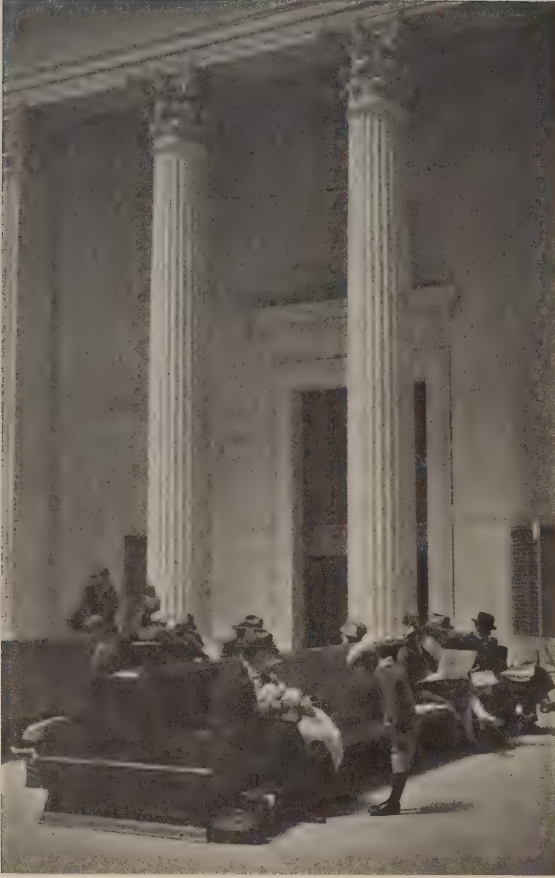
Pictorial Possibilities in the New Union Station of Chicago

ALFONS WEBER



ON May 16 the new Union Station of Chicago was opened to the public. It was a very pleasing surprise to the traveler, but still more so to the camera-enthusiast who is more concerned about beauty, than just how many millions of dollars were spent and the dimensions of the building in feet. The opening of this new railroad station has satisfied a long-standing wish to have a suitable building in which interior-exposures are entirely possible. The new Union Station will satisfy every photographer, because there are skylights, which cover almost the whole ceiling and which admit

enough light to allow instantaneous exposures on regular film-material with an F/4.5 lens, even in the corners of the halls, without danger of serious underexposure. Of course, contrast will be natural in corners and stairways. An F/6.8 lens will be sufficient in the center of the halls. All exposures will have to be made at not less than 1/25 second because the travelers will move in every direction and cannot be stopped. In our day, when every pictorialist has a small camera with an F/4.5 or F/3.5 lens, in addition to his larger outfit, it will be found that this is the ideal camera with which to make exposures. It does not attract much



THE WAITING-ROOM

ALFONS WEBER

attention. In case a larger camera than $2\frac{1}{4} \times 3\frac{1}{4}$ size is used, it would be advisable to go up to the galleries, which will cut out the foreground and from there even long-focus lenses can be used to advantage. In every case, it will be possible to make a perfectly exposed negative.

The accompanying pictures were made with an Ernemann Miniature Camera with an F/3.5 lens of 3-inch focus, at full opening and $1/65$ of a second, which would be about equal to $1/25$ with F/4.5 lens. The most difficult problem is to watch out for the travelers who come from both directions. Some of them are very careless and thoughtless. A photographer or a camera means nothing to them. Others put down their traveling bags and insist on having their portrait made. The latter is the greater problem of the two which are usually met at every large railway station. The background, which often makes

or spoils the picture, will always be harmonious on account of its classic architecture. The details and proportions are never disappointing and the cream-color finish reflects the light beautifully. The companies which have erected this magnificent building deserve the greatest credit; for they have made it not only practical, but a wonderful Union Station artistically. It will be only a very short time when the last scaffolding is out of the way and then we may expect real masterpieces of pictorial interior photography, which will do justice to this beautiful building. It will surely inspire the pictorialist to express the feeling which overcomes him, when he enters the halls. The possibilities for pictures are found here everywhere. The galleries and stairways give an opportunity to make the interiors from all elevations, which is a splendid help to get the desired effect.

Human nature is varied, and every pictorialist



THE INFORMATION-DESK

ALFONS WEBER

has his personal ideas how and from which angle the exposure should be made to get personality in the picture and to show that the new Union Station, from an architectural standpoint, is one of the finest buildings for interior-exposures that any photographer could desire. There are a great many columns with elaborately finished capitals of magnificent proportions. The wall-paneling and ornamentation are of the highest degree of excellence.

In this wonderful setting, the pictorialist will find an endless variety of possibilities to produce any desired effect. The most difficult thing to do will be to have figures just in the right place at the moment that the exposure is made. Not enough stress can be laid on this point. To illustrate this, it is suggested to examine the picture, "Rainy Day" in which the colonnade on the outside is on one of the buildings of the new station, and this was used for a setting.

By exposing just at the right moment, when the group was on the pictorial point, a picture was possible, which is above the ordinary snapshot. The exposure was made on a very dull day in March at 10 A.M.; $1/50$ second, at $F/3.5$.

If the figures had not been at the right spot, the picture would not have been a success. This shows clearly that in architectural pictures it is very necessary to have human interest in the right place, which is also essential to give an idea of the proportions of the building. In our day of fast lenses it is a great advantage to be able to make such pictures, where there is no trace of underexposure. It may not be advisable to use a filter in the interiors, and thus it is possible to save every fraction of light. Eastman Film packs No. 500 were used for the pictures with the following Contrast Developer, which has excellent keeping-qualities, when kept in brown bottles:



THE CONCOURSE

ALFONS WEBER

Stock Solution A: 20 oz. Warm Water
 1 oz. Hydroquinone
 1 oz. Sodium Bisulphite
 1 oz. Potassium Bromide

Stock Solution B: 20 oz. Water
 2 oz. Caustic Potash

For use take 1 Part of A
 1 Part of B
 1 Part Water

This formula was used for many years in tray development on Eastman films. For Agfa films this developer is too contrasty and the regular Eastman M. Q. Developer in glass-tubes with yellow label works well. Although the Eastman films can be stopped at any time before full development, the Agfa films will show scratch lines when development is not carried far enough. This combination will be found ideal for development of interior-exposures. Other developers may, of course, give equally good results; but after a trial of many others, the first one stands as the most satisfactory.

It is very important to have a clean, contrasty

small negative for enlargement. The Eastman Autofocus Enlarger is a wonderful outfit but it has its drawbacks. In the first place, the vest-pocket size negative can be enlarged to only a little over 5 x 7 and the F/7.7 lens cannot be interchanged to F/4.5 which would cut down considerable of the exposure for Chloride-paper. These small negatives could easily be enlarged to 11 x 14 without much loss of definition. When the manufacturers have such an Autofocus Enlarger on the market, it will be another step forward to a perfect enlarging-camera.

With such pictorial motives as can be arranged in the new Union Station, without being suspected by the subjects, a thousand different real pictures can be made. It will save disappointment to select first the standpoint from which the background looks best and then to figure out on which spot the human interest should come in. Then wait for the person or group which comes up to expectations. This should not take very long in such a station.

How to Organise and Maintain a Camera Club

E. H. BROWN

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Part II

VIII. Club-Meetings



THE question of meeting-nights is of no little importance. At the beginning, the chances are that one meeting a month will be sufficient. Never more than two. The new club will, at first, have but little to offer the members and two meetings a month will almost certainly exhaust this material. More frequent meetings will have the effect of degenerating into "gab-fests", with little or no benefit to the members.

Although informal discussions of this kind may be of great interest to the more enthusiastic camerists, there will be many members whose interest lies not in idle chatter but in instruction, competitions, exhibitions, etc. Meetings of this kind will rapidly dampen the ardor of all but the most rabid enthusiasts, and some members will become disgusted and drop out. The new club cannot afford to lose a single member and the officers or committees should see to it that something of real interest and benefit is scheduled at each meeting.

IX. Club-Competitions

Your new camera club is now organised and functioning more or less efficiently. The problem now is to sustain the interest of the members and cause the club to develop and grow in size. Up to a certain point, the larger the club the more benefit each individual will derive from it. In clubs of several hundred members there is a tendency to split into small personal groups and many members are unknown to each other. Your new club does not have this problem to face at present. Your interest lies in increasing the membership, with the assurance that all members will be personally known to each other.

One of the first items of importance among the activities of a camera club is frequent club-competitions. These keep up a spirit of friendly rivalry among the members and, in addition, serve to develop a high degree of photographic ability. The club-competitions are usually on a monthly basis and soon the question of subjects will arise. The monthly competitions should be in charge of a Competition Committee. Either the committee may assume the task of selecting suitable subjects or it may be left to the members.

The usual subjects of landscapes, marines, portraits, genres, etc., may be chosen, but a better plan for the new club to follow is to assign definite and specific subjects, each member photographing the same subject.

The new club has been formed for the purpose of "promoting an understanding of photography" and this very object is attained by specific subjects for competition. As an example, if the subject chosen were the "First Methodist Church" one member might make a purely commercial photograph, another might develop the subject into a truly pictorial result, and others would, perhaps, produce pictures of varying degrees of excellence. The winner should be obliged to explain how he made the picture, the technical details, and why he went about making it in his particular manner. If this is done each member will learn something of value from the competition. He will see wherein he failed, and why. He will learn the difference between pictorial and commercial photography. Thus, every competition will carry with it a practical talk and demonstration on pictorial photography as understood by the winner.

The subject "Miscellaneous" should be studiously avoided during the first year or two of the club's existence. Later, perhaps, an occasional miscellaneous competition may be held; but even then it should be infrequent. Miscellaneous competitions are but a method of placating those members who may not be interested in the special assignments. As a means of adding to the photographic knowledge of the members they are unsuccessful. As a method of increasing the pictorial ability of the members they offer little.

Miscellaneous competitions are extremely difficult to judge impartially because of the very variety of the subjects. The judges are prone to allow their personal preferences to enter into the awards rather than the excellence of treatment and handling of subject. This fact has been repeatedly demonstrated in our important national competitions. With all due respect to the ability and integrity of the judges it is an impossibility to judge impartially portraits, landscapes, genres, figure-studies, still-life, etc., in a single competition because there is no basis for comparison unless there is a division of classes.

There is some danger in these club-competitions that one or two members may carry off all the prizes. This is more apt to happen in a small club than in a large one. The new camera club has probably been organised from a nucleus of one or two members whose work is superior to that of the other members. The continual awarding of prizes to the same competitors will have the effect of discouraging the other members. Regardless of the fairness of the matter, such members, if they will not voluntarily stay out of occasional competitions, should be barred. A rule to the effect that any member who wins two prizes in succession is barred from the following competition will solve this matter.

After the club has grown to some size, the competitions may be divided into two classes—advanced and new members. Don't make the mistake of terming the new members' class the Beginners' Class.

If this division is not made, it will be found that many of the beginners will hesitate to compete against the more experienced workers. In the new members' class they are placed upon a more equitable basis and eventually they will graduate into the advanced class. In making this division of classes, the assigned subject should be the same. The beginner may win in his own class and still see wherein he may improve his work by examining the pictures produced by the advanced workers. The beginner should not be barred, however, from the advanced competitions. If he feels equal to the occasion, permit him to enter his pictures. There should be a rule in effect that the beginner who wins an award in an advanced competition is thereafter barred from further competition in the New Members' Class.

Without this division of classes, the new member has no choice other than to compete against the advanced workers, or not compete at all. Even if he does compete, there is little chance of his winning. A member who constantly loses will finally drop out of the competitions and eventually drop to the grade of an inactive member. This, the new club can ill afford.

Prizes in a camera-club competition should be based on pictorial quality, treatment of subject, composition and technique. These are the things in which improvement is sought and for which the members have joined the club. Any other basis of awards defeats the purpose of the club.

The judges should be thoroughly instructed on this point, and they should be men capable of delivering a sound verdict. The Competition Committee should endeavor to secure judges who are not members of the club. An artist,

a professional photographer and a layman make an ideal judicial body for this purpose. If possible, the layman should be some one of local importance. The advertising value of the judges' names is valuable to the club from the standpoint of publicity. Further, the committee will experience little difficulty in securing them. The request to judge the pictures is a form of flattery that carries an irresistible appeal to the vanity of those selected.

The question of prizes in camera club contests has been the subject of much discussion. Some clubs simply use the word "prize" or "award" to indicate the rank of the best pictures as decided by the judges. Others offer small prizes to lend added interest to the contests and occasionally individual members offer prizes.

On the whole, the new club will find that the honor of winning, plus the attendant publicity, is prize enough. It may not be wise, however, to let the fact become known to the general public that the prizes are merely nominal.

X. Lectures and Demonstrations

Additional means of sustaining interest are lectures and demonstrations by club-members. Photographic salesmen and factory representatives are also usually glad to deliver talks and make demonstrations of their goods before the club. From their standpoint, this is good advertising, and inexpensive. From the viewpoint of the club, the members learn something of value therefrom.

XI. Exhibitions

Photographic exhibitions from manufacturers can frequently be secured for similar reasons—good advertising. Newly marketed papers, or new methods of manipulating familiar brands, as exemplified by such exhibitions, are of interest and education to the members, and inexpensive publicity for the manufacturers.

At this point, a word should be said about the Associated Camera Clubs of America. This organisation has for its principal object the exchange of photographic exhibitions and lantern-slides among the member clubs. It should be noted that about half of the camera clubs in the United States are members of this association. The dues are nominal and the new club joining the association secures the opportunity of seeing the best work from the other clubs. This, in itself, is an education and a monthly exhibition of this nature will bring many members to the meetings who might otherwise stay away.

One of the first actions of the new club, after it has been duly organised, should be the application for membership in the above association.



ABOVE THE CLOUDS

F. Y. OGASAWARA

HONORABLE MENTION—FRONT-COVER ILLUSTRATIONS

XII. Hikes and Outings

Hikes and outings to the country are also a valuable aid in sustaining interest in the club. Some clubs have one outing a month, while some take short trips to the country every Saturday afternoon. These outings are partly social and partly photographic and they tend to bind the members more closely together. Each member usually brings a camera and shoots scenes while on the trip and although the pictures made under such conditions seldom prove of great artistic value, they do take on a personal interest as souvenirs of the outing and thus react to the benefit of the club as a whole.

Some clubs appoint one of the members as official photographer of the outing. He is furnished with film and paper at the expense of the club and it is his duty to make a series of pictures of the trip. Later these pictures are mounted in a small album and preserved as a historic record. A series of such albums forms a highly-prized addition to the club-library.

Outings may be simply pleasure-jaunts to enticing beauty-spots or they may be picnics. If the latter, each member usually contributes his share toward purchasing the food-supply.

Lantern-slide exhibitions, motion-pictures and social gatherings of the members at dances, card-parties, and so on, also serve to stimulate interest. It should be remembered, however, that the primary purpose of a camera club is photographic, and too great a proportion of social but non-photographic meetings should be discouraged.

XIII. The One-Man Camera Club

Just as there are factors which will serve to increase the popularity of the club, so too there are dangers which have a tendency to disorganise the club. These should be guarded against.

First, there is the one-man camera club. This is the club wherein all the activities are centered about one individual. He arranges the competitions, the lectures, the demonstrations and the exhibitions, he attends to sending out notices of meetings, and, in fact, he personally is the camera club. The other members follow like sheep and depend upon him to do the things which they themselves should aid in accomplishing. In effect, he stages a monthly or semi-monthly photographic vaudeville performance and the other members become the audience.

This is a very unhealthy condition. A club of this nature may be successful for a time; but the moment that the leader slacks up, the organisation goes to pieces. No matter how unselfish he may be nor how he may have the best interests of the club at heart, he cannot

forever be the camera club. Unless provision is made for a suitable successor the club will find itself in difficulty when his energy and force are taken from the club.

Every member of the camera club should have a voice in its affairs. Each member owes a duty to the club and should shoulder some of the responsibility toward making it a success. This may be accomplished by means of various committees, such as the Entertainment, Education, Program, Exhibition, House, Outing and other committees. If committees of three do not include every member of the club, the committees should be enlarged to four or five members each. As the club grows and assumes more activities, there will be need of more committees, and thus every member will have a personal interest and a personal responsibility in the successful functioning of the club.

The committee-chairman knows that should the club activity which his committee supervises be unsuccessful it will be because of his lack of interest, and the club-members will expect an explanation from him. Under a condition such as this, it is the exception rather than the rule for a committee to fail to function properly. The steward is obliged to fulfill his stewardship. The committee-chairmen, under this plan, virtually become the leaders of little clubs within the club. When the time comes for a new officer, the camera club will have a number of capable candidates trained and ready.

Of course, in every club there are always a few members who will not shoulder any responsibility whatever. These, fortunately, are in the minority. If the plan outlined above is followed, and if the club's officers as *ex-officio* members of each committee supervise the several committees to see that they function properly, little fear need be felt.

XIV. Social Status of Members

Another occasional cause of trouble within the camera club is the varying social status of the members. Member "A" may be a locally famous attorney while member "B" may be an humble carpenter. As long as they remain upon a strictly photographic footing, little trouble may be expected; but when social activities other than photographic are injected into the club life, they do not always mix so well. This is to be expected. While this is a democratic country, such things as differences in education and position when not bound together by a common interest can do nothing else than conflict. For this reason, many camera clubs do not attempt to go beyond the purely photographic.



DECORATION

HONORABLE MENTION—FRONT-COVER ILLUSTRATIONS

WALTER RUTHERFORD

The question of sex may also enter into the smooth-working camera club. In the California Camera Club, for example, women are welcome. The Chicago Camera Club bars them. Camera clubs have been organised, have flourished for a time, and then foundered over the sex-question. Others have experienced no difficulty at all and men and women enjoy their hobby upon an equal footing. No advice can be given. It is largely a matter of opinion and local conditions.

The same situation holds true of professional and non-professional members. Some clubs bar professional photographers even to the point of requesting the resignation of members of long standing who turn professional. In other clubs the professional photographer is welcomed. In some cities, professional photographers will have nothing to do with the camera clubs because of professional jealousy and the belief that the camera club is inimical to their business. This, of course, automatically solves the problem.

Another point to consider is the minimum age limit of members. In most clubs eighteen years is the minimum requirement, although a few will accept young members. This should be governed by individual wishes.

One serious source of trouble for the camera club is the formation of cliques. Sometimes a group of half a dozen or more advanced workers,

pictorialists and salonists, will form a tight little corporation within the camera club. This is the cause of considerable dissatisfaction and unpleasantness among the other members and may ultimately result in disbanding the club, as has occurred in several cases. Sometimes the clique is not formed of advanced workers and salonists but of men of similar professions such as physicians, surgeons and dentists who all have common interests. Of course, there is no objection to the individuals in such a clique being as chummy as they wish away from the club. But when, within the club, the clique acts to the detriment of the other members, it should be tactfully and carefully handled so that neither the members of the clique be antagonised nor the welfare of the club as a whole be jeopardised.

XV. Business Meetings

Business meetings form another prolific source of trouble. Although they may not cause the actual disbanding of the club, they do result in lessened interest and loss of members. The club-member who comes to a meeting to learn something new about his hobby and has inflicted upon him a lengthy list of, to him, more or less meaningless reports and communications leaves the meeting with a bad taste in his mouth. If

this is continued, it will eventually result in reducing the club to its original enthusiastic organisers, and their promotion-work will have gone for naught.

Some clubs never have a business meeting of the members. In such clubs the Board of Directors acts in a similar manner to the Commissioners in a city governed under the commission form of government. The Board of Directors meets at such times as may suit its members, it is responsible for all club-transactions, and makes nothing but an annual report to the club. The various committees make their reports to the Board and it takes such action as it feels to be in the best interests of the club.

If your club is not managed by a Board of Directors, it will be necessary, of course, to have business meetings. In this case, they should occur on specified dates, not more frequently than once a month and, preferably, quarterly. Members not interested in the business-meetings are then at liberty to absent themselves.

Regular meetings of the club should never be infringed upon by the discussion of any club-business, nor the reading of reports.

XVI. Publicity

One of the most important items in connection with a camera club, if it is to grow and prosper, is publicity.

There are two kinds of publicity—paid advertising and free write-ups. Your camera club, of course, is not in a position to contract for display-space and it is highly doubtful if such advertising would show a profit even were the club able to afford it. We will, therefore, turn our attention to the free write-ups.

It is axiomatic that you cannot get something for nothing. This holds true in newspaper publicity as in everything else. Although a certain amount of publicity can be obtained in the form of short items which are actual news and thus acceptable to all papers, to obtain the better class of publicity such as special write-ups and half or full-page features, the camera club must give something in return.

One of the best methods of obtaining publicity is to obtain representatives from the newspapers as members of the club, and then appoint them on the Publicity Committee. While, in a sense, they will be serving two masters, it is surprising the number of things they can develop which will turn matters of relatively little importance into good feature-articles which will advertise the camera club and, at the same time, make interesting stories for the papers.

In order to get such representatives in the club, it may even be necessary to offer them a free

membership. But, before doing so, they should be thoroughly "sold" on the merits of the camera club else the free membership will not be appreciated at its true worth and little, if any, return will be obtained in the way of publicity from the investment. However, it is seldom necessary for the camera club to go to such extremes. The wide-awake cameraman on a daily newspaper is usually among the first to join the club.

Assuming, however, that the camera club is unable to obtain newspaper representatives among the membership, the pointers given in this chapter may assist the Publicity Committee in obtaining frequent stories in the papers.

The return that the camera club must give for the free publicity is in the form of features, competitions, etc., that will make good newspaper material even though they may not always be the best camera-club material. This phase will be covered in the examples given.

Free publicity may be divided into two varieties—actual news, as previously mentioned, and special activities and "stunts". Actual news is never turned down by any newspaper as it is the business of the newspaper to collect as much news as possible and pass it on to the reading public. For this reason, the many activities of the camera club, properly written up, become real news. As this type of publicity is easier to obtain than the special-feature stories, it will be covered first.

Don't expect the reporter to write-up the story as you want it to appear. It is not sufficient to furnish the reporter with the facts. He should be given the story already written up as it should appear in the paper. This is the work of the publicity committee. This committee should make a report of every meeting, every outing, and every other activity of the club, and turn original copies, not carbons, over to the reporter, or even better, directly to the city-editors of the various papers.

If you attempt to save time by making carbon-copies of the story, you will be very fortunate, indeed, if your article appears in any paper save the one which received the original copy. The editors of a newspaper are busy men. They must get out the paper daily. Publishing a sixteen or thirty-two page paper, or even a larger edition, every twenty-four hours, is a Herculean task that is accomplished every day in newspaper offices all over the country. It is not done by re-writing every item that is submitted. Further, if the editor of the paper which received your carbon-copy were to print your story just as you wrote it, he would run the risk of seeing the same story appear word for word in the papers published by his competitors. As he

doesn't have time to re-write it himself, he simply omits it, and the camera club suffers.

For this same reason, the publicity committee should be careful to word each article submitted so that there is no duplication, even though the subject covered is the same. If you send exactly the same story to each paper, and the copies are originals, they may all appear in print. But when the editor learns to his consternation that his competitors have printed exactly the same story, word for word, your next item will receive scant consideration. It will have an excellent chance of finding its way into the waste-paper basket instead of seeing the light of day in print.

Therefore, original stories, each somewhat different from the others, should be sent to the editors of the several papers in your town.

In writing the stories, beware of what is commonly known in newspaper parlance as padding. Here again the element of time enters into the production of the paper, and the editor simply will not waste his time, nor that of his re-write man, in paring your story down. Remember that, while the club is of vast importance to its small circle of members and their friends, it is but a tiny segment of the vast cross-section of life which daily finds its way to the offices of the newspaper. When you shall have become such an important part of the life of your community that the paper can't get along without you, you are relatively safe in submitting almost anything with the assurance that at least some of it will be printed. But, at present, you are still "small potatoes". Don't expect the editor to do your work for you.

Boil your story down to the utmost. Tell the whole story, but tell it as quickly and concisely as you can. You'll have a much better chance of having it accepted.

Newspaper-space is valuable. A column inch in a newspaper is worth anywhere from seventy-five cents in small cities with newspapers of limited circulation, to several dollars an inch in the larger cities. As you write your story, keep in mind what it would cost you if you were paying for it. Inasmuch as you are being presented with from \$1.50 to perhaps \$25.00 worth of space, be reasonable, and don't expect the editor to add a few dollars worth more just because he likes you. He doesn't.

Another point to bear in mind is not to flood the newspapers with stories. When you have a definite announcement to make, or a real bit of news to turn in, write it up the best you can. If you follow the advice given above, you'll be sure to see it come out in the papers. But don't earn the reputation of being a "publicity hog". Highly-trained press-agents some-

times fall down when they try for too much publicity, and your camera club certainly cannot expect to do better than these experienced men.

Let me repeat. When you have real news write it up as concisely as you can. Your very first paragraph should answer the questions: What? Where? When? Who? Don't fail to get this information across first. Then, if your subject permits, you may go into a little more detail, if necessary. If the editor is pressed for space, he can eliminate the additional copy and still get your story in. True, it may be brief, but it's there.

On the other hand, don't be afraid to tell the whole story. Some items may, in the opinion of the editor, merit more space than others. When you have something of real importance, cover it fully and let the editor's judgment guide him in deciding how much to use. But don't attempt to drag out the unimportant stories.

Following are given a few news announcements that actually appeared in the newspapers. Note how concise they are, yet how complete. Note also, that the stories in different papers covering the same announcements are differently worded. Compare the difference between the story written by the Publicity Committee and the same story written by a reporter.

Names, for obvious reasons, have been omitted.

(Competition Publicity)

.....WINS CAMERA CONTEST

First-place in the April competition of the..... Camera Club was awarded to.....at the weekly meeting of the organisation Tuesday night at the club's headquarters. The subject for the contest was "The City National Bank Building." That for May has been announced as "The Confederate Monument in City Park." Eleven new members were elected at the Tuesday meeting.

CAMERA CLUB PRIZE IS WON BY.....

First prize in the April competition of the..... Camera Club was won bywith a photograph of the entrance to the City National Bank. The subject for the May competition, announced at a meeting of the club Tuesday night, is the Confederate Monument in the City Park. Eleven new members were elected at the meeting.

(Traveling-Exhibition Publicity)

CAMERA CLUB EXHIBIT THREE NIGHTS NEXT WEEK

Twenty-seven pictorial photographic prints from the Indianapolis Camera Club will be exhibited to the general public Tuesday, Wednesday and Thursday nights of next week at 1807 Main Street, under the auspices of the.....Camera Club. This is the first of the winter photographic exhibitions showing the works of clubs in the Associated Camera Clubs of America of which the.....organisation is

a member. Each month the work of members of a different club will be exhibited in..... The entire club body constitutes a committee to receive the public and explain the pictures.

There are several noted exhibitors in the coming exhibition, among them....., who entered some exceptional forest-views, an "Evening Sky Line" and similar pictures full of atmosphere.

Other interesting pictures on view are by....., who uses paper-negatives and obtains unusual effects in his prints as a result.

Still-life studies by..... are quite attractive. The prints were reviewed in a lecture by....., artist, at the last meeting of the club.

Sunday the members of the..... Camera Club, accompanied by their wives and friends, will spend the regular field day at "Top o' Hill" farm as guests of Mr. and Mrs..... on the Arlington road. The day will be spent in photographing scenery in the vicinity of Arlington.

(Salonist Publicity)

PICK.....PHOTOS FOR WESTERN EXHIBIT

Four photographs made by members of the..... Camera Club were among the 113 pictures selected by the directors of the..... Camera Club from more than a thousand entries to be shown at the extensive exhibit of that club in..... throughout the month of January. Three of these photographs were taken by....., secretary of the..... club, and one by....., club member. One of the former three was entitled "....." showing a striking scene of the..... building, taken from among the trees in South.....

Mr.....'s picture was a photograph of the Thames river, showing Albert Bridge, London, England. The picture was made some years ago.

(As written by Publicity Committee)

CAMERA CLUB ELECTS.....SECRETARY

..... was elected secretary of the..... Camera Club Tuesday evening to fill the unexpired term of the retiring secretary.....

A demonstration of desensitising, the latest modern development in photography, was given. In this process it is possible to develop negatives in white light without the use of a darkroom.

One new member was also elected.

(As written by a Reporter)

.....TO SUCCEED.....AS SECRETARY

..... will succeed..... who resigned from the office of secretary of the..... camera club it was announced after a meeting of the club Tuesday evening.

Demonstration of the new apparatus which makes development of negatives possible without the use of a darkroom was held at the meeting. The method which makes this possible is termed "desensitising."

(Hikes and Outings, etc.)

CAMERA CLUB BREAKS INTO MOVIES ON OUTING

A one-reel moving picture, with members of the..... Camera Club as actors, was taken during the outing of the club Saturday and Sunday at Lake

..... and will be shown at the next meeting of the club. The members were guests of....., kinematographer for the one-reel picture.

The principal actors were....., who gave a burlesque Hawaiian dance, and....., who demonstrated some dry-land fishing from a canoe, done through the agency of trick photography.

The orchestra of the club furnished music during the week-end. About twenty members of the club attended the outing.

(Demonstrations)

METHODS OF PRINTING DISCUSSED AT CAMERA CLUB MEETING

"Methods of Printing" was the subject of an address by..... member of the..... Camera Club, at a meeting of the club Tuesday evening. Fifty illustrations were used to show the varied effects in printing photographs brought about largely by different kinds of paper.

Seven different kinds of paper, with three different developers, were used with the prints shown.

"The negative is seldom responsible for a bad picture," Mr..... declares. "Almost always the fault is with the kind of paper used and the developer employed."

The meeting was held at the club rooms at..... street.

If your club follows the style shown in the above news-announcements, you need not fear that the stories will not be accepted.

In order to catalog the types of stories that are considered as news-items by the newspapers, the following are given together with notations on how they should be written up.

1. *Announcements of meetings.* This is news only when some special subject is to be handled. Announcement should be very brief, not over six or eight lines.

2. *Reports on meetings.* If something of unusual importance was handled, such as a demonstration of some new method of photography, a lecture or a talk by a member on some special feature, the newspaper will accept it as news. Two short paragraphs will cover it.

3. *Election of officers.* Just enough space to cover the names and titles. If desired, an extra paragraph may be added naming the retiring officer. In the case of a resignation, the names of both the new and resigning officers should always be given.

4. *Winners of monthly competitions.* This deserves perhaps two short paragraphs unless the competition is of some special significance. As an example, a contest with the subject "The Spirit of Christmas" might be held, closing some time before Christmas. This would merit three or four paragraphs. If the winning pictures were unusually good, and quite original, some of the papers would probably be glad to reproduce the pictures, as the subject is timely. Perhaps such a competition might not be especially



MARE'S TAILS
ELEANOR L. SMITH
HONORABLE MENTION—FRONT-COVER ILLUSTRATIONS

desirable, but it is one of the payments made by the club in return for the publicity.

The club which is attempting to advertise its city by the selection of subjects depicting beauty-spots, prominent buildings, parks, street scenes, etc., in its competitions, is almost sure to find that the papers will be glad to publish the pictures if the winning photographs are in some way different from the class of work turned in by the staff-photographer.

5. *Club-exhibitions.* An Annual Exhibition, properly handled by the club, is good for from a quarter to a half column. A brief prior announcement of the exhibition may secure a paragraph or two, and if the editors are advised by letter of the importance of the exhibition, the chances are that reporters will be assigned to cover it. If this is done, prepare your story and turn it over to the reporters. They will be grateful because you have saved them work. Furthermore, the editor acknowledges the importance of the event when he sends a reporter, and you may safely turn in a good story. Prominent details of the exhibition should be written-up first. The latter part of the article should be devoted to a review of some of the best pictures. It will probably be accepted by the editor unless he is pressed for space.

6. *Traveling Exhibitions.* Exhibitions from other cities, if shown to the general public, are always good for several paragraphs and, occasionally, as much as a quarter of a column. If the work of nationally famous photographers is among the prints, it may be safely stretched a little longer.

7. *Salonists.* Announcements of members who hang their work in big salons are always acceptable. Home folks like to know about it when a fellow townsman has succeeded elsewhere. The editor knows this and will never turn down an item of this kind if it is properly written.

The outline given above covers the principal types of news-announcements welcomed by the editor. Others may be added, dependent upon the activities of the club. But confine your news-items to events which really are news.

Excellent publicity may be obtained through special features and stunts. As an example of what may be done along this line the following hypothetical case is cited. If a camera club, during the recent international interest in ghost-photography had employed a professional medium, arranged a battery of various types of cameras, invited the reporters to examine the unbroken seals of the packages containing plates or films, made a number of exposures in the presence of the reporters while the medium went into a trance, every newspaper in the city

would have been full of the news the following morning. Under such a test, if the plates proved to be blanks when developed, the camera club could have made the definite announcement that there was nothing to the so-called spirit-photography. If, by any chance, something *did* appear on one of the plates, every newspaper in the country would have carried the story.

In any case, the camera-club members would have had a good time and the club would have received considerable local publicity.

This is just an example of what may be accomplished by the wide-awake publicity committee of a camera club. Newspaper-writers on the committee can devise new stunts from time to time which will eventually build up a reputation for the club and result in augmented membership.

Kodak contests for the amateurs of the city—non-members of the camera club—together with lists of the prizes to be awarded will merit considerable publicity if the club desires to stage competitions of this nature. When the names of the winners are known, more publicity may be secured and, perhaps, some of the winning pictures reproduced in the papers.

With special reference to pictures for newspaper reproduction, what the newspapers desire, other than photographs of men in the public eye, are local scenes made from a different viewpoint than that of the staff-photographer, timely pictures of whatever nature, and pictures of the unusual and bizarre. The club which makes a point of selecting such subjects for competitions is sure to see much of its work in the papers.

Remember, however, that the picture which may be successfully reproduced in a high-grade magazine, such as PHOTO-ERA, may not reproduce at all in the newspaper. A newspaper halftone is seldom finer than a sixty-five line screen and to reproduce well under this condition, a photograph must be filled with detail and with a long scale of gradations. Neither a soft, flat print nor a harsh black-and-white contrasty picture will reproduce satisfactorily. The print need not be glossy, but it should be sharp, and the gradations clearly defined.

Many editors will demand the exclusive use of pictures, if they are to reproduce them at all. This is a delicate matter for the club to decide. If the paper is not granted the exclusive publication-rights it may refuse to use the pictures at all. If it is accorded this exclusive privilege the competing papers may reduce the amount of publicity they might otherwise give you.

If the pictures are of such importance that the editors cannot afford to turn them down, it becomes a different matter; but this is seldom the case. The chances are that you will be

compelled to give exclusive rights. In doing so, you should grant the privilege to the paper which is best in a position to give you an adequate return in circulation. The paper which has the largest city-circulation is to be preferred to that having, perhaps, a greater total circulation but a relatively smaller city-circulation. Further, in return for this exclusive right you are entitled to insist that the editor favor you with more copy space in other write-ups. You are conferring a distinct favor upon him by granting him the sole right to publish the club's pictures, and he is usually willing to offer something additional in the form of write-ups and news-items. In this case, you may safely make your items somewhat more comprehensive than those given to competitive papers.

The question of publicity should be handled tactfully. If your club is to prosper, you must have it, and have as much as can reasonably be obtained. Do the best you can, and avoid antagonising the editors. Even a little publicity is better than none at all, and if the editor turns against you entirely, you will have lost a very valuable asset.

XVII. The Camera Club Bulletin

There are so many arguments in favor of a camera-club bulletin and so few against it that it would seem that every camera club in the country would publish one.

A camera-club bulletin is an excellent means of sustaining interest among the club-members. Everybody likes to see his name in print. Through the bulletin the camera club has the opportunity of satisfying this craving and thus retaining the interest of the members.

A camera-club bulletin also offers the opportunity of reaching thousands of camera-users in the city who might not pay much attention to the newspaper write-ups. In the bulletin, the camera club has a monthly opportunity to call to their attention the benefits of membership in the club. The bulletin is the source of many new members in the club.

The principal objection to a camera-club bulletin is the item of cost. If the bulletin is to be printed for the members only, and to have no additional circulation, the cost of publishing a printed bulletin every month becomes prohibitive to the small camera club. In such a case, the mimeograph may be employed and either a weekly or a monthly bulletin may be issued. With the modern tools for drawing and writing on stencils a very creditable bulletin may be produced on the mimeograph at very little cost.

If a printed bulletin is desired and the club

is not large enough to afford it, the cost may be defrayed by means of advertisements in the bulletin. It should be noted that some of the largest clubs in the country, well able to defray the entire cost of their bulletins, issue monthly publications which are fully or partly paid for by the advertisers. Advertisements may detract from the appearance of the bulletin; but the fact that they provide the funds to meet the printer's bill should bear considerable weight in debating this question.

The club with several hundred members will have little difficulty in securing sufficient advertising to pay for the cost of production. The advertisers may believe they will not secure a profitable increase of business from the advertising; but, nevertheless, the cost of the space is so relatively small as compared with the business they already secure from the members that they do not care to risk a possible loss of business by not advertising and thus incurring the displeasure of the club-members.

The case of the small club is somewhat different. There, the business of the members may not be so great that the advertiser is literally compelled to advertise. He may advertise or not, at his pleasure, without risking much. Therefore, to secure that advertising, it becomes necessary for the club to devise ways and means of creating new business so that the advertisers will receive a return from their investment in space in the bulletin.

A bulletin, to do this, must have a big circulation among non-members of the club. To achieve that circulation the bulletin must take on the nature of a local photographic publication with articles designed to stimulate the interest of the "snapshooter" and aid him in making more and better pictures. Such items as "Don'ts for Camera-Users", "More Enlargements", "Proper Exposure", "Better Albums", and similar subjects will appeal to the non-member amateur. They will also stimulate business for the advertisers as well as bring new members into the club.

If the advertising-receipts permit, a monthly snapshot-contest for non-members might be inaugurated. Either cash-prizes or orders on the advertisers for photographic goods might be offered. A contest of this kind will be played up strongly by the newspapers because this is real news affecting thousands of their subscribers. The club, of course, reaps the benefit from this additional publicity. The judges in such a contest should, if possible, be a local artist, a prominent photographer and a member of the camera club. The advertising-value of the names of men of local importance is of tremendous value to the club.

Such a contest will result in creating business for the advertisers, and as long as the club does that, the advertisers will be glad to continue buying space in the bulletin.

Arrangements might also be made with the advertisers themselves to offer prizes. Local theaters, amusement-parks, etc., are often willing to put up substantial prizes for contests of this kind. In such cases the competitions cost the club nothing at all.

Circulation of the bulletin may be achieved by inducing the advertisers to place a copy in each delivery envelope of photo-finishing they handle. Bulletins merely stacked upon the dealers' counters do not secure satisfactory distribution. In the delivery-envelope the bulletin reaches the camera-user at the time he is most interested in photography. By this method, the advertiser not only pays for publishing the bulletin, but circulates it for the club. Usually the dealers will be glad to do this, as they thus assure themselves that they are actually getting the circulation promised.

If the circulation is developed to the point where the bulletin reaches several thousand copies monthly, and the club has frequent announcements of competitions for the readers—contests in which the members of the club are barred—it is quite possible that some of the large national advertisers will also take space in the bulletin. Two or three such advertisers will give the club the funds to carry on some really big contests, with benefit to everybody.

A bulletin of this nature has been tried out and proved successful. It has gained considerable publicity for the club it represents, has built up the membership, has received the co-operation of the local newspapers, has not only created new business for the advertisers but acted as a general photographic tonic in the city, has aided the amateurs in making better pictures and, finally, has offered them cash-prizes.

Illustrations for the bulletin, if paid for, would soon amount to a considerable sum. Halftones cost from \$5.00 to \$10.00 each and, unless the club-bulletin is favored with a great deal of advertising, this cost is exorbitant. One of your local engravers, properly approached, can be made to see the advertising-value of a credit line on a sample of his work reaching two or three thousand local readers every month. Usually, he will be glad to make the cut free, especially if some of the club-members are in a position to throw some extra business his way in return for the favor.

A picture is a great help in adding to the attractiveness of the camera-club bulletin. In addition, it gives the members a real incentive

for entering their work in the monthly competitions, as the picture made by the winner is usually selected to adorn the first page of the bulletin.

A bulletin properly edited, well printed on good quality paper, and illustrated with examples of the members' work is one of the best advertisements a camera club can have.

If illustrations are used, the cuts may be preserved and, at the end of the year, an Annual may be published. A small assessment against each member will pay for this—if advertising in the annual is not desirable. The cost of the annual will be comparatively little as there is a minimum of typography and the principal cost is the paper stock. An annual will be kept and treasured by every member of the club, particularly so if he is fortunate enough to have a reproduction of one of his pictures in it.

XVIII. Conclusion

The organisation of a camera club is comparatively simple. To maintain the club and keep it running smoothly is quite another matter. It requires work, hard work, and lots of it. The path is stony and uphill all the way, but it has been traveled before and can be traveled again.

You will meet with many disappointments and at times it will appear almost an impossibility to keep the club going. Don't quit! You have started something and your own personal pride should prevent you from admitting a failure.

One of the principal causes of discouragement is the non-attendance of members. Many meetings will be held at which not more than four or five members appear, and it will seem that the club is a failure. Not so. Some of the largest camera clubs in the country seldom secure an attendance of more than ten per cent. of the membership at their regular meetings. In one case, a club with more than two hundred members held its annual banquet, including an exhibition, dance, monologue and other attractions and only thirty-two members attended. Your new club with but twenty or twenty-five members is doing very well if you average five members at a regular meeting.

Don't give up. A camera club is not built in a day. Temporary disappointments should not influence you to relax your efforts but should spur you on to greater endeavors.

The reward? Only the satisfaction of having accomplished something. You will not be crowned with laurels nor placed upon a pedestal. On the contrary, it may appear that your efforts are not even appreciated. Don't expect the plaudits of the multitude but look within yourself for the reward. It comes from within, not from without, but it is none the less sweet for that.



MT. CHOCORUA, NEW HAMPSHIRE

J. D. HUNTING

The Chocorua Tower

I wonder how many mountain-lovers know that the United States forest-service is about to build a fire-lookout tower on the summit of Chocorua mountain, one of the wildest and grandest peaks in our eastern states. No longer will the great square block of granite be left as nature intended it should, to form the highest pinnacle of this noble sentinel of the White Hills. Let us hope that a storm of protest will arise and another Holmes come forward to write:

Old Granitesides

*Aye, clamp her battered summit down!
Long has it stood on high,
And many an eye has danced to see
That beacon in the sky;
Beneath it rung the redskins' shout,
And burst the thunder's roar;—
The meteor of the mountain-air
Shall sweep the clouds no more.*

JAMES T. TROWBRIDGE, in *The Boston Herald*.

Practical Kinematography

HERBERT C. McKAY

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Chapter IX—Speed-Variation



HERE is a great deal of confusion as to the slow-motion and stop-motion, high and low speed films. This is due to similarity of names and the fact that the meaning changes according to whether you are kinematographer or spectator. The slow-motion film is a film which when projected shows the action occurring much slower than normal. This is also known as motion-analysis film and is known to kinematographers as high-speed film, because it is exposed at a much higher rate of speed than normal. Thus high-speed film, exposed in a high-speed camera, becomes the slow-motion film of the theater audiences.

Conversely stop-motion or low-speed film is that obtained by cranking very slowly or with a complete stop of any length between each pair of frames. This film shows the subject moving at many times normal speed upon the film and the spectator would naturally call it high-speed film when in reality it is low-speed or stop-motion film. If you will get these terms straightened out it will save you a lot of trouble.

A slow-motion film exhibits an actor whose movements are very slow, many times slower than normal. This variety of film has proved popular as a novelty, but has become commonplace. As you know, one foot of film passes through the camera each second. Let us suppose that an actor walks across the room in five seconds. We use five feet of film in photographing this action and when projected the action will require five seconds, as the projector passes one foot of film per second.

Now let us suppose we speed up the camera so that one foot of film passes through the mechanism in the period of time normally required for one frame. In other words we will use sixteen *feet* per second instead of sixteen *frames*. Then, the actor will pass across the room in ninety feet of film. When projected this ninety feet of film will require a minute and a half instead of five seconds. Thus it is apparent that the higher the speed of the camera the slower the speed of the projected image and conversely, the slower the speed of the camera the faster the speed of the projected image.

The mechanism which will pull film through the camera with the proper intermittent movement at normal speed is wonderful enough;

but when we stop to think of this cycle occurring two hundred fifty-six times each second it is difficult to understand how the mechanism or film either can stand the strain. But it does, and that is the important fact.

Any good professional camera can be operated at double or triple normal speed; but I must emphasise that to do this endangers the entire mechanism and should not be attempted. It is far better to obtain a special shuttle or camera than to ruin an expensive professional camera.

High-speed cameras of many types are now available. One of the most inexpensive is that made by the Wilart Camera Company. This is similar in appearance to their news-model and sells for two hundred and fifty dollars. It is a good camera for the man who expects to do high-speed work only occasionally. For the man engaged in scientific research, or any work requiring any amount of high-speed work, more professional apparatus is advisable.

The Bell & Howell Company make a special high-speed shuttle to be used with their professional camera. This shuttle provides for exposures up to about two hundred sixty per second and is adequate for all ordinary purposes. With this shuttle is provided a gear-box for attaching to the crank, which gives the requisite crank-speed without having to increase the actual crank-speed to an unreasonable degree. This shuttle and outfit costs seven hundred and fifty dollars, and provides the owner of a Bell and Howell professional camera with an efficient high-speed camera.

The DeBrie camera is made in a high-speed model, and is perhaps one of the highest types of high-speed cameras yet developed for field-work. The DeBrie has some features which appear impossible to the ordinary mechanic, yet which function perfectly.

First bear in mind that the camera operates at a maximum speed of two hundred forty exposures per second. Yet each frame is brought into exact register by four pilot-pins which engage the perforations during the instant of exposure. These pilot-pins ensure a rock-steady picture upon the screen. Another feature is that at no time in its travel is the film submitted to pressure and all plates and rollers over which the film passes are recessed so that no actual contact occurs.

It is obvious that the film must be perforated with extreme accuracy and for this reason the camera is not warranted to work perfectly with any film other than fresh Eastman film. A perforation-gauge is furnished for checking up on the perforations. A speed-indicator is built into the camera which shows the speed of exposure. This dial is calibrated to show the number of times normal the speed is. The calibrations are 3-4-5-8-10-15 equalling 48-64-80-128-160 and 240 frames per second. This camera with four hundred foot magazines weighs only twenty-two pounds. The latest quotation I have received on this camera is \$2,250.

The first practical use made of this type of film was for insertion in news-reels where its novelty challenged attention; but such a valuable addition to research-methods could not long go unnoticed. At present, such films are far more widely used for scientific purposes than for theater-use.

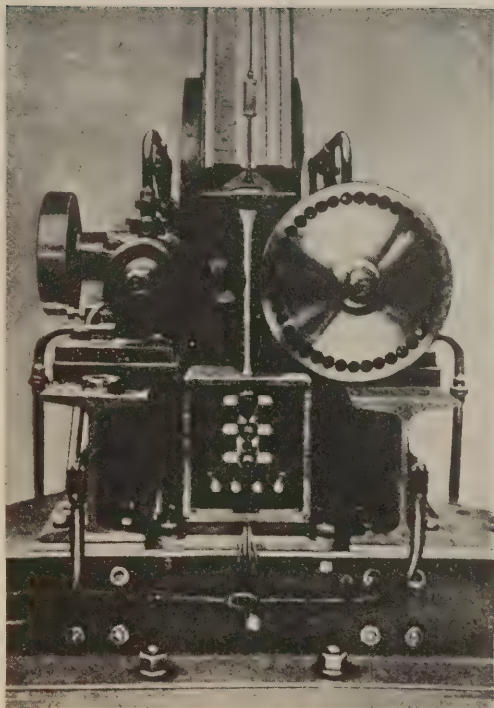
The first use recalls the original experiments of Muybridge which gave birth to motion-pictures. The slow-motion film is used to analyse motion. This analysis is used by physiologists to determine the *modus operandi* of common motion of the body. It is used by artists to discover the truthful appearance of a body in motion. It is used by scientists to analyse motion in mechanics and by efficiency engineers to eliminate useless motions of workmen. The true analysis of motion is very useful and has already shown valuable results.

Another use of the high-speed film is delineating motion which is invisible to the human eye by reason of its speed. In this connection, I wish to describe briefly a camera which was recently constructed in England for the photography of objects moving at extreme speed.

This camera known as the Heape & Gryll High-Speed Kinema Machine, I can describe through the courtesy of the Editor of the *Scientific American* who has furnished the details of this latest development of the kinema art.

The Heape & Gryll makes two hundred eighty-eight pictures or frames successively, two stereoscopic films of like size, or it will make the two bands of two hundred twenty-eight frames each in succession. It exposes these frames at the rate of 5,000 per second and has given perfect pictures at this rate of speed.

Briefly, the machine consists of a sixty-eight inch drum which carries the two bands of film side by side. This drum turns at speeds from 100 to 1,000 revolutions per minute which gives exposure-speeds from 500 to 5,000 frames per second. In front of the film grooves, which are



Courtesy of the Scientific American

THE HEAPE & GRYLL HIGH-SPEED CAMERA

cut into the face of the drum, the lens wheels revolve. Each lens wheel is a disc carrying forty lenses and which are revolved at such a speed that the lens travels downward at the same rate of speed as the film itself, thus each strip of forty frames of film has each frame exposed through its individual lens and then the cycle is repeated. Thus no shutter is required to close between each two exposures. The shutter on this camera operates in about one-sixteenth of a second; but in that brief interval a complete film is exposed. The shutter is used to prevent multiple exposures upon the rapidly traveling film.

As the actual interval of exposure in the highest speed is but one-hundred-thousandth of a second, it is obvious that some source of intense light must be used in order to affect the film in this brief interval. For small objects not more than fifteen inches in diameter two 120-ampere searchlights with three-foot reflectors are focused upon the object; but for larger spaces magnesium and aluminum are used as sources of highly actinic light.

Exposures are made by breaking an electric circuit. Thus the passage of bullets through glass-bulbs, bursting shells, explosions and similar

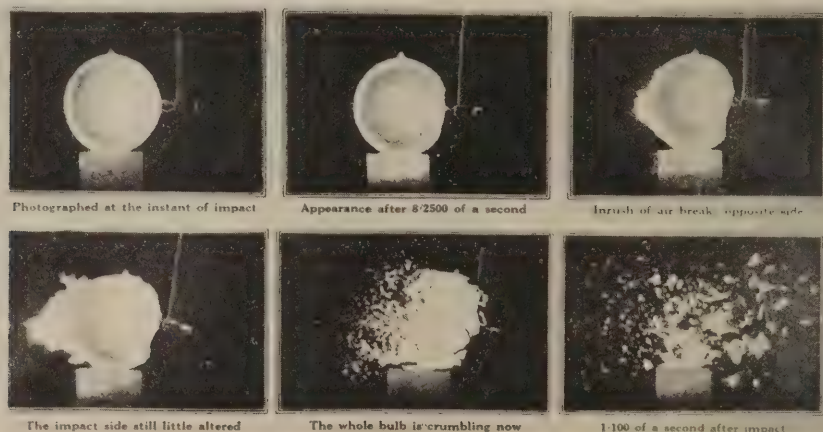
occurrences which we commonly call instantaneous are photographed upon sufficient film to have a projection time of from ten to fifteen seconds. Thus science is served in being enabled to study at leisure certain phenomena which have heretofore been known only through logic and deduction.

In dramatic production the moderately high-speed cameras *i.e.*, up to two hundred fifty per second, have a use in depicting fairyland scenes, dreams and so forth, and a properly introduced slow-motion scene in such fantasies may be made very beautiful indeed; but so many awkward, ludicrous slow-motion films have been so

motion picture must be studied as a separate field of the photo-dramatic art and must be developed along lines entirely aside from those which the present-day motion-picture follows.

Stop-motion unlike slow-motion may be made with any camera suited for straight work. In fact many stop-motion subjects may be filmed with a camera which is entirely unsuited for even passable straight work.

Slow-motion demanded high-speed cameras, conversely stop-motion requires a low-speed camera. In fact, slow-motion as usually understood requires a full stop after exposing each frame with an inter-exposure interval of from a



Courtesy of the Scientific American

THE HEAPE & GRYLL MAKES SUCH PICTURES POSSIBLE

introduced that the public is tired of them. Remember that any motion must be perfect, it must be the personification of poetry if it is to appear beautiful in slow motion. A broad sweep and a jump may be pretty at normal speed, but slowed, unless the actor has perfect technique it will be but a succession of awkward and ugly attitudes. It takes a highly trained dancer to delineate a motion which is beautiful and harmonious throughout all of its phases. This is the reason that many speed-pictures, such as the amateur Graflex user makes, are so disappointing. Most of them are awkward.

The kinematographer who obtains a trained ballet for his cast and makes some slow-motion pictures of fairyland, using fantastic settings and costumes and some expert character actors is going to become famous and is going to give us a motion-picture which will go far toward becoming a classic. There is a great field in slow-motion; but to cultivate that field, the slow-

few seconds to minutes or even hours. This work was first used to introduce trick-effects into theater pictures and was also one of the first tricks employed, so that to this day the single turn crank or the 1:1 crank is often called the trick-crank.

In present-day work a kind of stop-motion is used, that is one in which the crank speed is slowed but not stopped. This results in the moving objects upon the screen dashing about with dizzying speed. This was once far more popular as a comedy effect than it is today.

The greatest popular use of the stop-motion principle today is the production of animated cartoons. As animation is a decidedly effective form of presentation in advertising, sales and educational films, as well as in the production of trick-titles, I shall give the basic operations in producing an animated film.

The animated cartoon is made by photographing successively a number of hand-drawn

cartoons, each differing slightly from its predecessor. These cartoons are drawn upon cards which have two or more registration-holes in the edge. These holes fit over registration-pegs in the easel. Thus the operation of photography is facilitated. However, the manual labor of drawing hundreds of cartoons would be endless, so that a number of dodges are used to avoid this work.

In such motions as running, walking and so forth, where the cycle is repeated, a series of six or eight drawings are used which are drawn upon transparent celluloid. These are used over and over again, being moved forward slightly each time. In like manner if a figure stands still and shakes his fist, the body is one drawing and the arm and fist are drawn upon the celluloid in various positions.

When a figure is desired to run off the artist's drawing-board and run about the room or furniture, the entire animation is drawn upon celluloid and so the desired action is obtained. Thus by such devices the physical labor of animation is reduced, but it is laborious enough as it is.

The actual photography is carried out usually by having the camera suspended with the optical axis vertical. This allows a flat easel to be used which makes the operations much easier. The crank of the camera is connected with the operating crank at floor-level by like chains and sprockets. It is evident that if single frames are exposed to slightly varying drawings, the projected film will show these variations as motion. Such is the secret of the animated cartoon.

Although the cartoon is the most widely known form of animation, the same principle is widely used in animating diagrams and maps for purposes of education and instruction. It is also used in making doll-stories and other fantastic films, produced primarily for children, but which have proved widely popular with adults. The doll-film requires expensive dolls and painstaking care. The dolls should be well made, with expressive faces, and with fully jointed bodies. Such dolls are expensive, but they soon pay for themselves if successful film is produced.

The sets should be made of wall-board, and painted in fantastic designs. It is better to paint the entire set in gray shades, as color is deceitful. In monochrome you can tell just what the set will look like when filmed.

The set should be fantastic, quaint or in some manner obviously unnatural. If you try to paint a natural set, unless you are an experienced scenic artist with motion-picture experience you will produce but a poor imitation which would injure your film; but if you strive for artificiality

the effect will not be questioned and will serve to carry on the unreal effect of animated dolls.

The next step is to determine exposure. As speed in exposure is no requirement, I should suggest that all doll-work be done by artificial light. As time-exposures can be given, ordinary house-lighting will serve. This will allow fancy lighting-effects to be obtained by means of hand-mirrors, cardboard screens, spot-lights and so forth.

After the proper exposure has been ascertained, the next step is to obtain data for animation. A quick marching step will require a half second, a leisurely walk twice as long, and one step in two seconds is a decided strolling step. It is better to make a few feet of normal film and from it reduce common motions to frames. Thus one motion will require five frames, another eight and so forth. When this is done, you are ready for your animation.

Place the dolls in position and expose six or eight frames, then move the dolls slightly according to your animation data, expose one frame for the predetermined time, close shutter, move dolls slightly, expose second frame and so on until the film is complete. Remember that any film should last at least two and a half minutes or one hundred and fifty seconds of sixteen frames each. This will require only 2400 such exposures. You should be able to make sixty exposures per hour, so that the production of a two and a half minute film will only occupy you for forty working hours.

Midway between dolls and cartoons are the cut-outs, or paper dolls. These cut-outs have but one or two sides. They must present either their right or left side to the camera, and this lessens their value considerably. In fact this is such a serious disadvantage that, personally, I am inclined to think that the best use of the cut-out is in making shadowgraphs or silhouettes. These are made by photographing the shadows cast by the figures upon a translucent sheet of white material, just as photographic silhouettes are made. By doing this, many quaint effects may be produced which will be acceptable by reason of their novelty, if for no other reason.

(To be continued)

[Those of our readers who are amateur or professional kinematographers are urged to make use of our department "The Amateur Kinematographer" and to contribute practical and helpful items. We know that there are a number of our subscribers whose practical experience in kinematography qualifies them to make exceedingly interesting contributions which will be greatly appreciated by all our readers. EDITOR.]



AT THE SKYLINE

HIROMU KIRA

HONORABLE MENTION—FRONT-COVER ILLUSTRATIONS





EDITORIAL



The Art of Picture-Making

MANY persons, who have no photographic knowledge, seem to think that all the amateur has to do, in order to get a successful picture, is to look at an object, point the camera at it, look in the finder and then push the button. If these good people only knew that numerous little, yet very important, things must be considered before the amateur presses that button, they would look more seriously and, perhaps, sympathetically at this seemingly simple operation. It is not so easy as it looks.

First of all, the view-point is to be considered. There are many times, of course, when the camerist is so situated that, suddenly discovering a tempting subject—be it seen from the top of an omnibus, from a hotel-window or elsewhere—he must make the exposure at once or lose the picture. In such a case, the picture becomes a mere record. In dealing with certain difficult situations—particularly those where the human interest is a prominent feature—the worker may be required to exercise considerable courage, skill and judgment. And he seldom fails. If not troubled by untoward influences, the worker will study the scene before him, raise or lower his camera—in some cases preferring to adjust the lens-front itself—perhaps turn it to the right or the left, or affix a sky-shade or a ray-filter. He may even decide to give a time-exposure. Having brought no tripod, he sets about to improvise a firm base on which to rest the camera, utilising what material may be available. If he is discriminating, he will note the quality and direction of the light and govern himself accordingly. The novice, on the other hand, will yield impulsively to the lure of the subject, and make the exposure without regard to prevailing conditions. He may not be aware that the immediate foreground is unattractive or objectionable, whereas the expert worker, noting the absence of friendly, helpful shadows, concludes that the picture, however appealing it may be at the moment, is not worth while. He may make a memorandum of the spot and the direction of the sun (by using his pocket-compass) and visit the locality at some future time. Not having given his film-camera a thorough inspection, or not knowing that, owing to a previous fall, it is out of adjustment, the

novice may not be aware that the view-finder does not agree with the position of the image. Some object that he took pains to include in his view may not appear in the finished print, because of this discrepancy. The skilled worker decides to raise the lens-front of his camera. If the view-finder is a part of the lens-front, all is well. If independently attached to the camera—to the bed or elsewhere—the finder will not record all of the picture, unless allowance has been made in the finder for the amount of foreground to be omitted. A similar condition will prevail when the lens-front is lowered.

The novice, attracted by a pretty fountain, finds that its appearance is marred by the presence of a lot of street-gamins. Not knowing how to include them advantageously in his picture, he decides to drive them away. Such a tactless proceeding only serves to embarrass him. More urchins gather or, worse still, the potential mob may make hostile demonstrations, and he may be obliged to retire with his object unaccomplished. The experienced or tactful worker, however, will propitiate the youngsters and arrange them in picturesque fashion about the fountain; or he may lure them to one side—pretending to photograph them as a group—or to assemble them near the camera and so obtain a clear field. It is wonderful what a little persuasion may do. Or, the object may be to photograph a building in a busy business-street. Continually passing pedestrians and vehicles constitute a serious obstacle. The expert, stationed in a window across the street, stops down his lens, uses a slow plate and exposes for several seconds; whereas the novice risks a snapshot and obtains a greatly under-exposed result.

The average onlooker does not appreciate the importance of concentration of mind in the making of an important photograph. To talk to an autochromist, when he is engaged in computing the length of exposure, is not advisable. If his attention is diverted from his task, the amateur is likely to overlook such a detail as changing the stop, adjusting the exposure, setting the shutter or winding up the exposed film. Any one of these omissions spells failure, and may happen to the expert as well as to the novice. It is, then, not so easy as it looks—this picture-making with the camera.



ADVANCED COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value \$10.00.
Second Prize: Value \$5.00.
Third Prize: Value \$3.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already subscribers* will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes may be chosen by the winners, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, suitably engraved.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

All competition-pictures not returned are used to make up the PHOTO-ERA PICTURE EXHIBIT which is sent to schools, libraries, museums, camera clubs and to responsible organisations for exhibition-purposes, *free of cost*.

Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.
2. Not more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered into competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.
3. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. Prints may be mounted or unmounted.
4. Each print must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer, and printing-process. Enclose return-postage. Data-blanks sent at request.
5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he shall have received official recognition.
6. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces is sent with data. Criticism at request.
7. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.
8. Competitors who have won three first prizes within a twelve-month become ineligible to compete for prizes in this competition for *one year* thereafter.

Awards—Advanced Competition Subject—"Front-cover Illustrations" Closed July 31, 1925

First Prize: J. Vildensky.
Second Prize: Kenneth D. Smith.
Third Prize: Michael J. Pecora.

Honorable Mention: L. J. Creegan; S. Hatsukami; Hakon Haug; Nicholas Haz; Eleanor F. Jones; Hiromu Kira; Y. Morinaga; F. Y. Ogasawara; H. Onishi; Melvin C. Parish; Francis Parrish; Winston H. Pote; A. E. Rutenbeck; Walter Rutherford; J. Herbert Saunders; Ryokei Sawaji; Eleanor L. Smith; S. Tada; Herbert L. Wallis.



Subjects for Competition—1925

- "My Home." Closes January 31.
- "Miscellaneous." Closes February 28.
- "Indoor-Genres." Closes March 31.
- "Table-Top Photography." Closes April 30.
- "Artificial Light Photographs." Closes May 31.
- "Miscellaneous." Closes June 30.
- "Front-Cover Illustrations." Closes July 31.
- "Real Sunrise and Sunset Pictures." August 31.
- "Wild and Cultivated Trees." Closes September 30.
- "Miscellaneous." Closes October 31.
- "Lakes, Rivers and Brooks." Closes November 30.
- "Interesting People and Places." Closes Dec. 31.

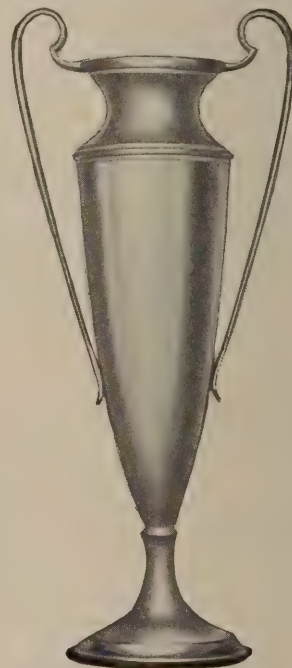


Photo-Era Prize-Cup



THE PICTORIALIST

FIRST PRIZE—FRONT-COVER ILLUSTRATIONS

J. VILDENSKY



IN THE PERGOLA

KENNETH D. SMITH

SECOND PRIZE—FRONT-COVER ILLUSTRATIONS

Advanced Competition

THE dominant quality of a front-cover illustration of a magazine is its power to attract the attention of the casual observer. In a publication like PHOTO-ERA, it is essential that such a picture have pictorial beauty, dignity and technical excellence; also, in an adequate degree, carrying-power—to catch the searching or straying eye. As the field devoted to photographic subjects is somewhat meager, the Publisher, Mr. Beardsley, in his advance notice in the June issue, placed no limitations on the choice of subject. Consequently, the entries in the competition, "Front-Cover Illustrations", showed considerable variety in this respect. Nevertheless, several competitors elected to suggest the element of photographic practice, one of whom, J. Vildensky, succeeded in expressing this idea in a striking and artistic manner. In his "The Pictorialist", which was awarded the highest honor in this competition, Mr. Vildensky shows the pictorial worker at an advantageous moment. The resulting pictorial design is bold, original and significant, and the element of balance is strongly and convincingly indicated. The artist—engaged in examining the pictorial image—forms an admirable foil to the sturdy and bulky tree.

The receding, distant shore appears a trifle weak in the reproduction, but is adequately vigorous in the original print. Although tree and figure are in deep shade, a longer exposure with a ray-filter might have shown an improvement in the tonal values.

Data: A scene in California; July, 3 P.M.; sunny; Ica $3\frac{1}{4} \times 4\frac{1}{4}$ Trona Camera; 6-inch Tessar Ic; stop, F/16; no color-screen; $1/25$ second; Eastman Film Pack; pyro, tank-development; enlarged on Artura Carbon Black E. Smooth.

Kenneth D. Smith is again characteristically unconventional in his "In the Pergola", the second-prize award. One is tempted to suggest that the distance between the figure and the left margin be diminished by about one-quarter of an inch; but such a procedure would remove a part of an already interesting pillar of the pergola and impair the appearance of the group of vertical supports. The young woman, happily arrayed in a costume that is consistently light throughout—even the stockings being light in tone—appears to be in the attitude of advancing to receive visitors, unless, indeed, she is in the act of delivering a monologue or, having finished, is bowing in response to merited applause. As the title gives no clue to the character of her activity, the observer is permitted to give free



"WHY DOESN'T HE COME?"

MICHAEL J. PECORA

THIRD PRIZE—FRONT-COVER ILLUSTRATIONS

rein to his imagination in this respect, which may be regarded as an added interest to the picture. Thus, the beholder may be able to determine why the hands are not advantageously displayed. The simplicity of the composition, with the absence of intruding or incongruous accessories, is to be highly commended. This praiseworthy feature is a characteristic of Kenneth Smith's work.

Data: Made at Bramwell, West Va.; March, 3.30 P.M.; good light; $7\frac{1}{2}$ -inch Vinto lens; used at F/6.3; $3\frac{1}{4} \times 4\frac{1}{4}$ Auto Graflex R.B.; $1/20$ second; Graflex film; pyro, tank-developed; enlargement, Old Master Portrait Bromide, Buff.

In "Why Doesn't He Come?" the artist has displayed a pleasing originality of design. Usually, the watchful maiden is shown in a standing attitude; whereas, here, she is portrayed as taking things comfortably and without seeming eagerness or anxiety. She is arrayed in an alluring gown, in viewing which the critic of the modern height of feminine fancy is convincingly disarmed.

The action of the young woman, of peering through the window, is spontaneous, the attitude is easy and graceful, and without the necessity of showing the face which is easily imagined to be fair. The illumina-

tion is adequate and artistic, whereas the curtained window, through which the light is entering, is of just the right tonality and harmonises admirably with the seated figure. The technique is excellent, throughout. One regrets, however, that this delightful composition loses by the apparent need of more space around the model. This is noticeable particularly at the base of the picture; but, probably, the artist was greatly restricted, in this respect. Here, too, the composition is simple, and all the more artistic and effective, in character. It is a lesson worthy of emulation.

Data: October, 2 P.M.; medium bright light; Ica Ideal Camera (9 x 12 cent.); 6-inch Carl Zeiss F/4.5 lens; F/4.5; 2 seconds; Kodak Film Pack; pyro, tank-development; enlarged on Ortho Bromide.

WILFRED A. FRENCH.

One Born Every Minute

MR. NEWRICH: "I never want to enter that art dealer's shop again! He's swindled me!"

MRS. NEWRICH: "What's the trouble, dear?"

"I bought a painting from him last week, and I've found out that it's over five hundred years old."

Exchange.



SUBJECT FOR NEXT COMPETITION ADVANCED WORKERS



THE GREAT OUTDOORS

WM. T. ADDERLEY

Advanced Competition—Lakes, Rivers and Brooks Closes November 30, 1925

THOSE of our readers who have been privileged to know the delight of being near and on some lake, river or brook, during these past few months, will, no doubt, have a number of pictures which will meet the requirements of this competition. It does not matter whether the lake, river or brook is within city-limits or miles from the nearest railroad. There are places in Central Park, New York City, where a little careful selection of point of view will result in a picture apparently as far removed from civilisation as though it were made in the heart of the Adirondack Mountains. Hence, those who may not have had the opportunity to leave the city, may still feel that they have an excellent opportunity to win an award.

Obviously, the idea is to bring out the pictorial beauty of the lake, river or brook. This may be accomplished by photographing the subject from a boat, from the shore, at dawn, at sunset, in fog, in rain or whenever there is an opportunity to obtain a really beautiful, true effect. I say, "true effect" because we do not wish over-corrected, exaggerated effects which may be produced by too dense a ray-filter, over-printing, shading and other means. To be sure, such effects are spectacular and they attract attention; but they are not true and therefore do not

live as do the pictures which are simple, yet so compelling by their very fidelity to nature.

Although every effort should be made to have all pictures technically as perfect as possible, and great care should be exercised in the matter of composition, let me suggest that some consideration be given to the matter of the theme. There is a beauty about a lake or stream at the close of day which demands good technique and skilful composition; but these are not enough to bring out the very soul of that moment which, to me, is the most beautiful experience that a true nature-lover can have. At that time of day, with its peace and quiet, the mind turns to those who once shared such moments with us and to dreams and hopes for the future. If the pictorialist can, in the slightest degree, include these spiritual factors in the theme of his composition, he will, in my opinion, make a picture which is simple, true, beautiful and alive—a picture that will be a joy to live with forever.

This last suggestion may appear to be too much to expect from even an experienced worker; but I have noticed that where a man or a woman responds to those spiritual fires which burn eternally in nature, their pictures can no more help having a higher quality than a diamond can help being more brilliant than a piece of coal—although both come from virtually the same source. At any rate, this ideal thematic quality is worth the effort in all pictorial photography—it helps the picture and it helps the worker.

A. H. BEARDSLEY.



BEGINNERS' COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U.S.A.



Prizes

First Prize: Value \$5.00.

Second Prize: Value \$2.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already subscribers* will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes, chosen by the winner, will be awarded in photo-materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

Rules

1. This competition is open only to beginners of limited experience with practical camera-activity, and whose work submitted here is without any practical help from friend or professional expert.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints and enlargements up to and including 8 x 10 inches.

4. Prints representing no more than *two* different subjects, for any one competition, and printed in any medium except blue-print, may be entered. Prints may be mounted or unmounted, as desired. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

5. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail.

6. Each print entered must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent at request. Criticism at request.

7. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he has received official recognition.

8. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with data.

9. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

Awards—Beginners' Competition

Subject—Miscellaneous

Closed July 31, 1925

First Prize: Elmer P. Trevors.

Second Prize: Paul L. Miller.

Honorable Mention: A. J. Heidrich; Lieut. Alfred E. McKenney; Godfrey Priester; Irving Sparks; Doris E. Wright.

What Will the Beginner Do this Winter?

It is to be hoped that every beginner has decided without any reservations to keep his camera in active service this coming winter. The old idea of packing the camera away in moth-balls is giving way to the far more interesting program of winter-photography. Perhaps there may be a few who read these lines who will object that it is cold and disagreeable in winter, and that there is no good subject-material available. Very well, if these good people will not venture out, there is no reason that they should not find much of photographic interest in making interiors, portraits, and views from the very room in which they live. There is no need for them to go out to find interesting subject-material. Frankly, I have found that the underlying reason for lack of interest in winter-photography is likely a matter of dislike for exertion rather than any dearth of good subjects. Those who really enjoy using their cameras in winter seem to find no difficulty to select many delightful subjects.

Assuming that some of my readers will neither be coaxed or forced to make pictures out of doors in winter, what then? Well, there are so many photographic activities for them to enjoy that I hardly know where to begin. However, let me mention just a few which may help to solve the problem of a long winter-evening. Perhaps the most interesting is the matter of collecting, titling and mounting in an album the vacation-pictures. Surely, if the pictures possess any merit at all, they are worth permanent preservation and careful marking. Next, there are a number of negatives which may be well worth enlarging. After that, why not color some of the landscapes easily and quickly with any one of several excellent watercolor or oil-methods now being advertised? Some of these pictures would make very welcome Christmas presents or birthday remembrances. It is not a very difficult matter to make acceptable lantern-slides and thereby afford many evenings of pleasure to oneself and a group of friends. There are many competitions and salons open to amateur photographers, and it might be very much worth the time and effort to select several good negatives and make them up into exhibition-prints. And again, how many good books on photography have you read? How many photographic magazines do you read thoroughly? Do you belong to a camera club and are you active in promoting its growth and prosperity? Do you attend lectures on photography and try to profit by the friendship of some experienced pictorialist? If you answer "no", then there is much to be done before the pleasures of photography in winter are exhausted.

A. H. BEARDSLEY.



SUNLIT PILLARS

ELMER P. TREVORS

FIRST PRIZE—BEGINNERS' COMPETITION

Beginners' Competition

THE first-prize award, in this class of competitors, shows again the making of a promising pictorialist from an able beginner. Indeed, Mr. Trevors' effort would easily have won an Honorable Mention had it been entered in an "Architectural Subjects" competition for Advanced Workers. It is well-composed, well-lighted and technically well-made. Our promising artist has set his edifice on a firm foundation, for his foreground—the base of his picture—has been well managed, being of adequate area and *low in tone*. He appears to be a faithful student and a conscientious, painstaking worker. The contrast between the white or light-colored structure and the dark-green plants and vines has been softened by grateful shadows cast evidently by neighboring trees. The effect is delightful and artistic. By accident, or patient, intelligent waiting, the nearest pillar is almost in full sunlight, the several widely separated shadows being sufficient to relieve any possible monotony caused by uniform, unobstructed illumination. The Ionic columns are meticulously vertical, which shows skilful use of the camera. Whether the part of a tree at the left was allowed to enter the picture-area in order to relieve

the sky, or to serve as a possible balance to the imposing edifice, is not conclusively evident. In any case, this feature is *de trop*.

Data—scant, indeed—are: V. P. Kodak; stop, F/16; 1/25 second; hour, 9.15 A.M.

Paul L. Miller's "The Power House" was rescued from oblivion by the excellence of its proportions and its workmanship. The superb lighting of the powerhouse, in the print, does not quite assert itself in the halftone, unfortunately. The structure is well-placed, and the camerist took pains to secure an attractive sky.

Data: Keokuk Dam, Keokuk, Iowa; July, 3 P.M.; bright sunlight; Folding Brownie 2C; 5½-inch Meniscus lens; used at full opening; 7-time color-screen; 1/25 second; Eastman Roll Film; pyro, tank-development; print on Azo 2F.

The exposure connected with the three prize-pictures of the Advanced Workers and one of the Beginners—Mr. Trevors having ignored this item in his data—were all tank-developed! A somewhat unusual occurrence, and not without a rather convincing point in favor of the tank form of development.

WILFRED A. FRENCH.

Backward Moving Wheels in Motion-Pictures

THE apparent reverse rotation of wheels of advancing vehicles, often seen in motion-pictures, has puzzled many an observer. A somewhat similar optical illusion, or effect, may be noticed in the revolving fan of the public dining-room or restaurant, an explanation of which may fit the effect of backward-turning wheels. Perhaps, a satisfactory explanation is to state that motion-pictures are really a quick succession of still pictures—made at the rate of sixteen per second—the first of which shows the spokes of the revolving wheel in one position. If the next exposure of the film were made when spoke No. 1 had advanced far enough to be in the position of spoke No. 2, the picture would show no motion, as spokes are identical. If spoke No. 1 had advanced *less* than halfway to position of spoke No. 2, the *forward* motion would be noticed.

light, is so much brighter than the landscape which it illuminates, that if we expose long enough for the landscape, there is every likelihood that the sky will be overexposed enough to diminish the contrasts. Everyone knows that it is the underexposed landscape negative which best records the clouds. The lesson to be learned from this is that if we wish to get the clouds, we must not only have a color-sensitive plate and a suitable screen, we must be very careful not to over-expose.

The Amateur Photographer.

Snapshots and Pictures

It is stated elsewhere in this issue, says *The Amateur Photographer* editorially, that a snapshot may be in every sense a picture. Not only "may" it be a picture, but in more instances than is actually the case it "ought" to be. There is no excuse for saying of a poor



THE POWER-HOUSE

PAUL L. MILLER

SECOND PRIZE—BEGINNERS' COMPETITION

If, however, spoke No. 1 advances *more* than half way, the effect to the observer would be of spoke No. 2 moving *backward*, as that distance would be shorter, and the apparent motion of it, and all the spokes, or the entire wheel, would be in that direction. W.A.F.

Skies in Landscapes

THE novice who fails to get in his landscape negative any rendering of the clouds which are visible enough in the subject may be tempted to attribute his failure to the imperfect orthochromatism of his materials. This is only correct to a certain extent. The contrast between blue sky and white clouds hardly exists as far as the non-orthochromatic plate is concerned, although there are cloud-forms with which it can deal with fair success. The non-filter or self-screen plate is better in this respect; the orthochromatic plate and moderately deep screen is better still; the panchromatic plate with its appropriate light-filter is the best of all. But even when we have a combination of emulsion and color-screen which gives us theoretically true color-rendering, there will yet arise instances in which the clouds are less distinct in the photograph than they were in nature. The cause is that the sky, as the source of

result that it is only a snapshot. Some of the finest and most interesting subjects on exhibition-walls are "only" snapshots. In the earlier days of photography there was generally a separate class for hand-camera work, as though it were out of the question for it to stand comparison on equal terms with the more deliberate results of the stand-camera. The time for such differentiation has long passed. The hand-camera has increased the output of pictorial work, and added enormously to the variety and interest of the subjects treated. Some pictorial photographs are obviously the result of arrangement and careful deliberation; others are just as obviously due to the skilful use of the ever-ready hand camera. The word "snapshot" should no longer be used as a term almost of scorn.

We Editors

"SEDENTARY work," said the college-lecturer, "tends to lessen the endurance." "In other words," butted in the smart student, "the more one sits, the less one can stand." "Exactly," retorted the lecturer; "and if one lies a great deal, one's standing is lost completely."

Christian Guardian.



OUR CONTRIBUTING CRITICS



GRADE-CROSSING AHEAD

PAUL L. MILLER

THE PICTURE CRITICISED THIS MONTH

Whoever sends the best criticism (not over 200 words) before the last day of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

IN Mr. Miller's picture the saving grace of timeliness of theme makes a strong appeal to its reviewers. And thanks are due the artist for his confidence in our perception, in not actually portraying a grade-crossing tragedy or near tragedy. The daily press, the wayside signs, warning signals, record-pictures of disasters, all emphasise the need of caution.

It was left to the artist to picture the idea that peril sometimes lies in peaceful surroundings. He chose a country-scene in winter-time with an unobstructed view. He bordered his picture with decorative material, and obtained good tonal-values of land and sky. To make his point evident with the minimum of imaginative effort, he caught the swiftly-moving train, belching forth steam and smoke, indicative of relentless energy. He deemed unnecessary, and correctly too, the delineation of the crossing itself. He trusted us to understand his logic.

The outstanding defect is due to the viewpoint selected. The large expanse of highway, lacking in pictorial material, too light in tone for a foreground, and having an abruptness of perspective due to the use of a short-focus lens, offends our notion of fitness.

Constructive criticism—like trying to explain an ideal where we can only indicate its failures—is hindered by a lack of knowledge of the opportunities. It

would seem, however, that the artist might have found a more favorable viewpoint, and might have placed an automobile near the crossing to increase the sense of expectancy. If, in contemplation of the picture, we are reminded of danger, and act accordingly, it will have justified its existence.

J. W. ADAIR.

"GRADE-CROSSING AHEAD" by Paul L. Miller is a fine picture technically. It may be a record, but nothing else from the pictorial standpoint. In the first place, what was the center of his interest? Whether the road or train? The distorted road which occupies almost the whole left lower quarter of space has no meaning and seems to me unpleasant.

Perhaps Mr. Miller was attracted by the white smoke of a running train and snapped it; but without care. Where is the railroad-crossing? My imagination can not reach out of sight in this picture even when his title tells "Grade-Crossing Ahead". Is the picture worthless to keep? I should not say so, but will consider how to save the print. Cut off a half inch high from the bottom and then divide the remainder to two parts, the left one being one and a half inches wide. Now look at both of them: a scenery picture and a running train. I think the first one has some pictorial value and the second is a good record. If you listen to my advice, you will make two better prints from your one negative. What do you say, Mr. Miller?

DR. K. KOIKE.

THE first object of interest the eye perceives on glancing at Mr. Miller's print "Grade-Crossing Ahead" is the smoke from the locomotive which is glaringly



ROSE-STUDY

EDGAR S. SMITH

YOUR CRITICISM IS INVITED

white. On looking a while longer, my interest is drawn to the terribly bleak and dull foreground which apparently promotes an insurmountable barrier to the true meaning and numbs my artistic senses.

By cutting the picture in half an interesting panorama is obtained, giving a clearer view of the train and the crossing; yet, even this maneuver is overshadowed by the bushes on the right.

It never seems practical to photograph a train at an angle from the rear as all sense of the "Iron Horse's" power is lost and this is always the essence of a good railroad picture.

The one redeeming feature is the suggestion of the powerful engine hauling its long train of cars.

JAMES BELL.

WHAT beautiful smoke! That was my first impression. Surely, it is delightfully contrasted with the sky. Nevertheless, upon further observation I find two principal faults with the print. First of all, the road has been given too much prominence. It is very distracting; lacking both halftone and detail. At first sight, is not the eye first drawn to the chalky foreground? This should not be. The title invites us to see the crossing ahead, yet the road, instead of aiding us, appears to halt abruptly at the first turn leaving us up in the air, so-to-speak.

In the second place, the grade crossing has not been sufficiently emphasised. As it is, we have to search

for it. Indeed, were it not for the title we should hardly suspect the presence of a crossing at all.

A different viewpoint would have made a great improvement, technically and artistically. I venture the suggestion that had Mr. Miller made the picture near the tall tree at the left he would have been more successful. The road would then be less obtrusive; the crossing would have its deserved prominence and the express—with the beautiful flowing mane—would seem to fairly roar: "Grade-Crossing Ahead!"

ARTHUR L. MARBLE.

"YE gods and small sized fishes!" what if a high-speed auto had happened along from the rear when the photographer had his head concealed, ostrich fashion, under the focusing-cloth!

Moral: Never tempt fate by making a picture from such a position unless protected by a red flag.

If the print as shown in the engraving were trimmed horizontally one inch from the bottom (and bottom piece mailed to highway department for technical analysis) then the rest of the print would begin to pull itself together.

It would undoubtedly prove very effective to place an auto in the distance near the end of the fence to the left of the crossing sign, headed toward the track. The picture would then tell the story without a title.

As it is, we have not "Grade-Crossing Ahead", but *White Automobile Road* and white smoke.

True economy,—two pictures on one print.

H. L. VOSS.



OUR ILLUSTRATIONS

WILFRED A. FRENCH



"THE MOUNTAINEER", page 183, shows an admirable division of planes. The alpinist occupies a favorable position in the composition. To be sure, he is headed towards the right margin of the picture-area and is partly on his way there; but fortunately he is resting and absorbed in contemplating the grandeur of the mountain-scenery. The foreground has been chosen with artistic discretion. The student in pictorial composition would be dissatisfied if the mountaineer were standing on a snow-covered or ice-encrusted ridge instead of the present low-toned ledge. The masses which compose the middle distance (the slope) and the mountain-group exhibit the artist's fine sense of proportion. The atmospheric effect is superb. In the end, however, one regrets the absence of clouds in the great expanse of featureless sky. But this can be easily rectified by printing in some appropriate clouds.

What "Sunlit Porch", page 184, seems to lack in clearness and unity of pictorial design, it makes up partly in visual interest. As a composition, it needs simplicity of construction. Despite the suggestion of the title, the eye would stray elsewhere. Fortunately, the floor, in the foreground, contains several helpful shadows. These, together with the first pillar decorated in true Japanese style, seem to constitute the main source of pictorial interest.

"Winter-Landscape", page 185, I regret to find ordinary in subject and treatment. Mr. Kira seemingly wishes to invite the observer's attention to the broad, snow-covered river-bank, at the right; or is it to the distant, picturesque sky? Whether the partly concealed bridge, in the background, inclines naturally towards the left, I have no means to determine. The general pictorial quality, however, is excellent.

Data: Scene near Seattle, Wash.; December, 1924, 2.30 p.m.; sunshine; 4 x 5 Graflex; 8 $\frac{3}{4}$ -inch Wollensak Verito; stop, F/6.3; color-screen (ray-filter) K-2; 1/15 second; Eastman Commercial Ortho Cut Film; Premo developer; print, Carbon Black.

"Wild West", page 186, shows the Japanese influence in treatment. It is a gem, in theme, composition, and handling. The group of snow-covered buildings at the left forms the chief seat of attraction. The strong contrast of light and dark is a master-stroke. Harmonising shadows are a distinguishing feature of this well-ordered composition. There is not one intrusive note noticeable anywhere. A snow-clad mountain rears its head in the extreme distance, and a slender spruce climbs into the sky, imparting interest to this otherwise featureless area.

The low-sitting figure of the girl-worshiper in "The Believer", page 187, is extremely well managed. Her costume is dark, but not without character. The protruding feet, as well as the exposed parts of the body, are softly lighted and of a pleasing tonality. The plainness of the interior is doubtless in keeping with the subject chosen for interpretation. Despite the height of the apartment, the worshiping figure has been given adequate space about her, and the floor which she is occupying is wisely low in tone.

The elaborate tower of what the artist has named

"The White Temple" is placed in conjunction with the top of a tree, and the small branch of another. Page 188. The pictorial effect of this design is not entirely convincing. The tower itself is an incongruity in its fusion of two styles of architecture, and its lack of tonal uniformity.

A different view in which the side nearer the observer could be in shadow, or nearly so, and the left side illuminated by a soft light—if such a thing were possible—with the present tree removed or seen considerably lower, and the soaring twig entirely absent, might yield a result more artistic and satisfying, to me, at least, than the one shown here.

Data: Place, not stated; July 20, 1925, 4 p.m.; light, not given; Graflex 3 $\frac{1}{4}$ x 4 $\frac{1}{4}$; Anastigmat F/4.5; at F/8; 1/10 second; Eastman Super Speed Film; pyro; enl. on P. M. C. No. 9; Elon-developer.

Although Karl Struss, Dr. Pardoe, Dr. Kilmer, and others, have derived much artistic inspiration from the spacious and lofty waiting-rooms of the two great railway-stations of New York City, Alfons Weber comes forward with an admirably illustrated article on this subject. PHOTO-ERA readers have already obtained an adequate idea of this artist's technical ability, from his Honorable Mention picture of "Table-Top Photography" published in the recent July issue. In picturing "The Rainy Day", page 189, Mr. Weber chose a favorable view-point. Had he stood with his camera in the middle of the walk, the composition would have been laterally symmetrical; but he preferred to stand a little to one side in order to show the row of prettily lighted columns, with the rainfree spaces at the base of each, advantageously, leaving the opposite and, perhaps, less attractive side out of consideration. The illumination, throughout, is remarkably good, and the linear perspective equally so. As to the presence of human interest—that is well-nigh indispensable, although I should like to see the "patrons" shown a little nearer the artist's standpoint in order to relieve the monotony of the foreground; nevertheless, this has been accomplished by including the gently reflected columns—a pleasing feature of this interesting picture. On the other hand, I anticipate a plea that, possibly, on account of the somewhat spacious foreground, the picture be trimmed to the extent of one inch. I might favor this suggestion, were it not to mutilate the pilaster at the right and to sacrifice some of the attractive reflections. The technique is superb, and the definition not too assertive. The data are included in the article.

"The Waiting-Room", reminiscent but indispensable to this series of pictorial opportunities, is a joy. The grouping of waiting patrons seems to be entirely spontaneous. Everybody appears to be unconscious of the presence of the camerist. It is a delightful composition of a well-lighted interior. The eye rests with satisfaction on the beautiful, fluted Corinthian columns. How impressively they rise towards the entablature! And with what fine discrimination has the artist contrived to place one of the columns against the entrance! The effect is superb. Also, one must admire

the amount of perseverance it required to secure a composition like this.

"The Information-Desk" deserves much praise. It was a difficult task—unless, and it would be hard to prove, the members of this interesting group had agreed to co-operate with the photographer. Our eyes are on the clock, as a matter of course. It is the chief object of concern to the traveler; and why shouldn't it be conspicuous in our picture? The question asked by the patron at the beholder's right may be all about the arrival or departure of a certain train. The other individual, patiently waiting, forms the third member of an improvised triptych, as it were. The grouping of the participants in this quiet episode, however, does not seem to possess the element of fearlessness or indifference which distinguishes the "Waiting-Room". The dispenser of information has assumed a determined attitude. Why? Ask Mr. Weber. He made the exposure. The columns and pilasters in the background impart beauty to the scene, and the two openings, above, serve their purpose, and that of the artist, admirably. A pity, though, that the parallelism of the vertical supports, in this interior, could not have been maintained in the photograph.

In "The Concourse", page 192, the artist was confronted with a combination of difficulties which he overcame with almost complete success. One must sympathise with him here, for it is easy to see what he had to contend with. The light surging through the enormous window cannot be controlled, nor can the crowds which pass to and from the trains. A time of day must be chosen that best suits the purpose of the camerist. Taken as a whole, the present result is excellent and should satisfy everybody. Besides, all perpendicular lines, here, have been rendered accurately, and an excellent viewpoint was selected. Personally, I am glad that the lower part of the picture is in shadow. The absence of data connected with "The Concourse" is to be regretted.

Honorable Mention

As pointed out on page 214, a picture for the front-cover of a magazine should have the power to attract the attention of the casual observer. That pleases the publisher, for it may lead to a sale. For the purpose of close inspection, however, almost any good picture, if effectively reproduced, will do.

"Collector's Corner", frontispiece, is a composition that fills the eye by reason of the sheer beauty and interest of the subject. The picture is what it professes to be—truly a collector's corner. The observer will readily distinguish one object after another, with a superb model of an old frigate dominating the collection. The lighting and general workmanship of this achievement express one word—perfection. It is a picture that merits unstinted admiration. The connoisseur in antiques will gloat over Mr. Creegan's masterpiece, and the devotee of straight photographic technique, will caress the beautiful detail.

Data: March, 4 P.M.; light, 1-400 watt; Ica Trona (3¼ x 4¼); Carl Zeiss Tessar F/4.5 lens; stop used, F/22; 5-time color-screen; exposure, 3 minutes; Agfa Film-Pack; Metol-Hydro; enlarged on P. M. C. No. 8.

"Above the Clouds", page 195, spells vastness. It is, indeed, one of the oft-mentioned "great, open spaces"! This bit of the vast empyrean, even within the confines of a halftone-reproduction, impresses and thrills the beholder. This blending of aerial contrasts seems to express the innate love of the Japanese for

the suggestive, the poetic, and, above all, their intense love of nature. The artist is a Japanese, a member of the Seattle Camera Club—described elsewhere in this issue—and an artist to his finger-tips. Who will suggest a spot for the majestically soaring sea-gull other than the one actually determined by Mr. Ogasawara? The formation of the aerial masses—the light, cumulous clouds merging in the unfathomable, distant darkness, reflects for the artist's discerning eye.

Data: July 12, 1925; 4 P.M.; Kodak; lens at F/6.3; 5-time ray-filter; 1/100 second; Agfa Film Pack; glycin sea-gull negative made July 5, 1925; stop, F/6.3; 3-time ray-filter; 1/100 second; Agfa Film Pack; glycin; composite negative made from positives; print, Royal Bromide by projection.

Artistic taste and mechanical ability were largely responsible for the attractive and appropriate front-cover design, produced by Walter Rutherford, page 197. No finer pictorial representation of swans has ever graced these pages. One of the troubles associated with a picture of this kind is the reflections. The sketchy character of this feature, in the present instance, is a matter that speaks highly in favor of Mr. Rutherford's artistic discernment and alertness. The picture of the swans is placed apparently against the rim of an artificial pond, whereas the result is a combination of one print and the positive and reversal of another, representing a small section of the pond, and produced in the nature of a triptych. The result is a clever and very successful piece of work.

Data: side-panels June; center, August; bright sunlight; Auto Graflex (4 x 5) R. B.; Carl Zeiss Tessar Ic; 8¼-inch focus; stop (center) F/8; side-panels, F/4.5; exposure (center) 1/150 second; side-panels, 1/50 second; Seed Gilt Edge plate; M. Q.; enlarged on Argo Rough.

The decorative character of "Mare's Tails", page 201, emanated from an imaginative, poetic mind. It will appeal to many. The treatment of the theme is faintly suggestive of Corot's gentle style. The design is simple enough—a bit of land, two figures flanked by a tree on each side, and a sky with clouds of the kind known as "Mare's Tails". The manner of grouping the figures and the slight dissimilarity of the trees saves the design from being symmetrical; but the general pictorial effect is pleasing and suggestive.

Data: Scene near La Mesa, California; July, 4.30 P.M.; fair light; 6¼ x 8½ Century view-camera; 7-inch T. T. & H. lens; stop, F/16; color-screen K-2; exposure, not recorded; Ortho Film; Rodinal; print, Palladio-type.

The reappearance, in this issue, of the fine picture of Mt. Chocorua, by J. D. Hunting, is in appreciation of the many lovers of this familiar peak who have made a gallant and successful fight against the erection on its summit of a fire-station—an act which they considered both a disfigurement and desecration. The data were printed in the issue of February, 1923.

Hiromu Kira, a member of the Seattle Camera Club appears in the rôle of a successful mountain-photographer. His picture of Mt. Baker, page 210, expresses nobly the grandeur, size and beauty of that famous peak. The distance from the camerist's viewpoint is emphasised by the admirably grouped alpinists sitting admiringly in a foreground that has been wisely handled. Certainly, our Japanese friends have mastered the art of picture making!

Data: August 3, 1924; 11 A.M.; good light; 3¼ x 4¼ Graflex; 7½-inch Anastigmat; F/6.3; 10-time color-screen; 1/20 second; Eastman Film Pack; Premo developer; print, "Rapid Black".



ON THE GROUNDGLASS

WILFRED A. FRENCH



Camera Clubs Here and Abroad

IN his excellent article, "Camera Clubs are Trumps", printed in the last issue of PHOTO-ERA, George P. Wright pertinently asks, "Why is it that Britain with less than one-half of our population has five and one-half times as many clubs?" The answer he gave did not appear to me to be complete, for he doubtless knows that, being a comparatively tiny country, compact, and places very far apart accessible to each other in a few hours, Great Britain offers advantages which so enormous a country as the United States cannot equal. The English amateur photographer takes his hobby more seriously than his American cousin, is more industrious and supports his camera-club enthusiastically. Being situated not far apart, camera-clubs in Great Britain easily know of each other's activities, the competitive spirit is encouraged and each club accomplishes an amount of high-class pictorial work during the year that would astonish even the most active of American organisations. Much of the life of English camera-clubs is contained in the monthly letters of our English correspondents, the Cadbys. Many if not most camera-clubs over there provide the conveniences of social club-houses, such as billiard-and-pool tables, kitchen, and arrangements to prepare and serve food on the premises. The exhaustive articles on the subject of organising and managing a camera-club, by E. H. Brown—see our September and October issues—give in detail all that goes to make a successful camera-club. It seems as if the writer knew intimately the workings of the English camera-club, and that this knowledge furnished him the material for his exemplary articles.

Joseph Petrocelli in Europe

MR. JOSEPH PETROCELLI, a New York pictorialist of distinction, has been traveling in Europe since May, 1925. He appears to be on an extensive camera-tour. A letter, written at Stresa, on Lago Maggiore, was received by me a few minutes after I had been lost in contemplation of Wm. T. Adderly's attractive picture, "The Great Outdoors", page 216 of this issue. The shore and mountains in this picture seemed to me strongly reminiscent of the charming view which greeted me in 1903, as I strolled along the shore of the hotel, at Stresa—the selfsame, identical city, visited by Mr. Petrocelli! The letter by that pictorial worker is given herewith:

SRESA, August 8, 1925.

My dear Mr. French:

Your kind letter of July 6, has been forwarded to me, and reached me at Interlaken, a few days ago. Since I wrote you on April 10, I have not heard from Malta.

I left New York on April 27 for the Mediterranean and think that I shall remain in Europe about one year. As I am not following an itinerary, I do not know where I shall go next.

So far, I have visited Ponta del Gada (Azores), Madeira, Algiers, Athens, Baalbek (Syria), Jerusalem, Cairo. June 10, I landed at Marseilles, and from there I went up to Provence. From there I took the

Route des Alpes. From Grenoble, north, to Geneva, thence into Switzerland, stopping there at many interesting places. I have ascended Mt. Blanc, the Grand St. Bernard, the Jungfrau, the Matterhorn, Mt. Rosa, gone over the Simplon, etc.

I have made many exposures, developing my films, as I go along, at night in the hotels where I stop; but I shall not do any printing until I return to the United States.

Cordially yours,

JOSEPH PETROCELLI.

That Disfiguring Facial Make-up

WHEN attending a session of the annual congress of the P. P. A. of Great Britain, held in London, last May, I heard an interesting discussion about the facial make-up of lady-customers, between Chairman Haines and several members including Herbert Lambert, the eminent portrait-photographer of Bath. Whereas it was the opinion of some of the speakers that sitters, whose complexion was completely hidden by layers of ointment, rouge and powder, should be asked to remove the same and allow their faces and other exposed parts of the body to resume their natural appearance and let the camera and the retouching-artist take care of it, thus achieving an equally satisfying and flattering result. With this, several shrewd members eagerly agreed, for they saw an opportunity to make an extra charge for their own beautifying process by means of manipulative work on the negative.

Asked to give his opinion on this subject, Mr. Lambert quickly replied, "I say nothing, and simply photograph these bedaubed ladies as they are—lip-salve and all!"

The Value of Expert Knowledge

CONTRACTOR to professional photographer: "See here! Your bill is exorbitant. You have charged me twenty dollars for making two negatives and two prints from each. Please explain."

P.P. (an expert photographer of thirty years' experience): "That's easy. Five dollars for making the negatives and prints, and *fifteen for knowing how.*"

Living Statues

I HAVE before me the business-card of the art-dealing firm, Arthur Tooth & Sons, 155, New Bond Street, London, Works of Art. I remember to have seen the members of this firm, while abroad, last spring, finding all of them to be handsome, fine-looking men—works of art, indeed, as stated on their business-card and, probably, also on their stationery.

Not the Same

STRANGER, entering photo-supply store, to a clerk of seeming importance: "I am Tom Reeler, the movie-camera-man. Can I get credit here?" Manager: "I'm sorry, sir, but you'll have to get that on the screen."



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



Dye-toning Lantern-slides

PROCESSES of dye-toning are not very well known; but where a brilliantly colored slide is required they are eminently suitable, writes H. E. Rendall in *The Amateur Photographer*. In dye-toning we first convert the silver-image of an ordinary lantern-slide into some compound that has the power of strongly absorbing certain dyes; and then we place such a slide in a solution of the dye for the requisite time, and subsequently clear and "fix" it by removing the silver.

The best developer to use for the original image-is undoubtedly amidol, with a slightly increased proportion of potassium bromide; and a plain, non-acid fixing bath is recommended. The slide must be on the thin side, with very clear high-lights, as dye-toning is an intensifying-process.

After trying many mordants, it is my experience that copper ferricyanide is the most reliable. Any of the usual copper-toning formulæ seem to be suitable; but the copper sulphate must be pure, otherwise the slide will not tone to a rich, chocolate brown.

A typical formula is:—

- | | |
|----------------------------------|------------|
| 1. Copper sulphate (pure)..... | 60 grains |
| Potassium citrate (neutral)..... | 240 grains |
| Water..... | 1 pint |
| 2. Potassium ferricyanide..... | 50 grains |
| Potassium citrate (neutral)..... | 240 grains |
| Water..... | 1 pint |
- For use equal parts of the stock solutions 1 and 2 are taken.

After a thorough wash we can either remove the surplus silver-salts with hypo, leaving a weak image of copper ferricyanide, or the silver can be removed after dyeing, if this is preferred. The advantage of removing it at once is that it is easier to watch the process of toning; but as a trace of hypo in the slide will prevent it taking up the dye, on the whole, I prefer to remove it after dyeing. Although the course of procedure is a matter of choice, it is necessary to stick to whichever is first adopted, or the results cannot be satisfactorily judged. The presence or the absence of the silver makes a difference.

The following dyes have been recommended, and have given good results in my own experiments:—

Basic fuchsine (yellowish and bluish)—Carmin
Phenosafranine or Ilford Desensitol—A more yellowish tone

Methylene blue—Rather a dark blue
Auramine—A rich golden yellow

Orange and green have been obtained by mixing two dyes, and possibly deeper shades could be obtained by mixing three.

It is difficult to give any precise formulæ for the dye-baths. Fortunately there appears to be a good deal of latitude; but too strong a bath will give badly stained highlights, and the same failure occurs if distilled water is not used for dissolving the dyes. The working-solution should be about the same strength as ordinary color-inks, and to each six ounces of the dyeing-bath, half a dram of acetic acid is added.

Dyeing may take half an hour, and, in many localities the highlights will remain perfectly clear; where, how-

ever, the water is hard, they are always deeply stained, and must afterwards be cleared by soaking in water, slightly acidified with acetic acid. The dye may then be fixed by a bath of sixty grains of tannin in a pint and a half of water, to which is added a little hypo if the silver-salts have not been cleared. A short wash completes operations, and the slide is put on the rack to dry.

The slide dries with a very mat surface, and is greatly improved by varnishing. Unfortunately, most negative varnishes "draw" the dye from the image, and so spoil the highlights. I have recently overcome this difficulty by heating the slide, as much as the gelatine will stand, and varnishing as soon as the slide is cool.

Besides being a toning-process, there is no reason that this method should not be used to intensify a negative; in fact, I have been informed that dye-toning is now used for this purpose in stellar photography. The properties of copper ferricyanide as a mordant appear to have been discovered by Dr. Traube, though others have subsequently flattered him by patenting practically identical processes.

The Pioneer of Sunlight-Photography

New, if belated, honors have recently been heaped upon Louis Jacques Daguerre, who nearly a century ago gave photography its greatest practical impulse. This recognition, long after his death, was made at the Photographers' Exposition in Paris, recently.

Unlike many another pioneer adapter and inventor, Daguerre died with an assurance that his name would long live after him. The process of photography which he perfected bore his name. Even today the word "daguerreotype" conveys to the mind the quaint, little likenesses of our grandparents which are treasured family-relics.

Daguerre began his adult life as a scene-painter in a Paris theater, where his inventive genius was first manifest in the devising with a partner of the diorama, which gave an illusory effect to the stage-scenery.

Meanwhile, Niepce had been seeking a means to obtain permanent pictures through the action of sunlight, and Daguerre became associated with him. When Niepce died, Daguerre alone carried on the work with such success that in 1839 and succeeding years he became recognised as the pioneer of sunlight-photography.

Baby Ciné Camera on Polar Expedition

WE understand that the Algarsson Polar Expedition, which left on June 22d for Spitzbergen, is equipped with the Taylor-Hobson kinematograph lenses which were used on the Oxford University Arctic Expedition last year, and a Pathé Baby Ciné Camera. The Baby Ciné is required mainly for the sledging parties, for which, of course, its compactness and light weight make it peculiarly suitable.

The Amateur Photographer.



THE AMATEUR KINEMATOGRAPHER

HERBERT C. MCKAY

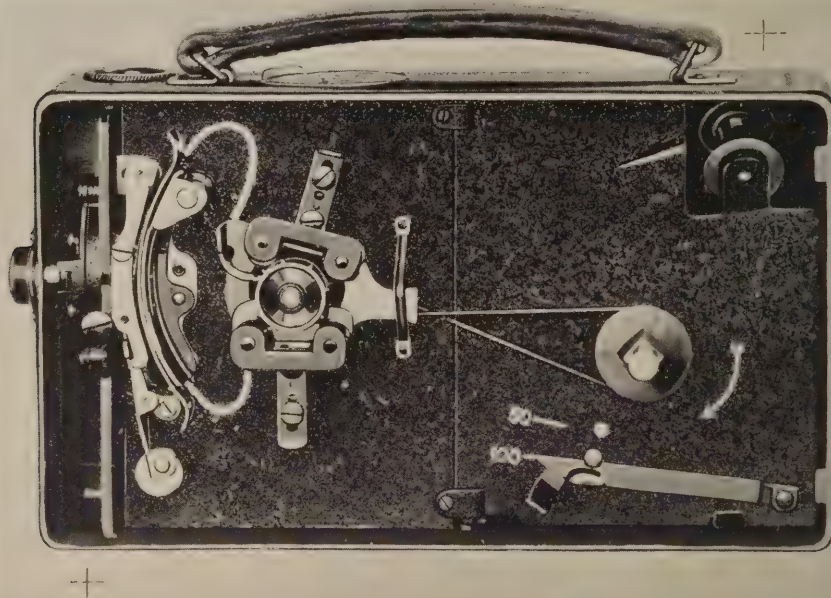


A New Motion-Picture Kodak

HOME-MOVIES would seem to have been now brought within complete realisation with the announcement just made by the Eastman Kodak Company of their development of a new model Ciné-Kodak. Practically pocket size, as simple to fill, hold and operate as an ordinary Kodak and at a price within reach of all, \$70, amateur motion-picture making should now take

and printing and is an emphatic economy of operation. The price of the film it is announced also covers the cost of finishing at any one of the Eastman laboratories. No tripod is necessary. This new model is held at waist-level, the subject found in the view-finder; and, by simply pressing a spring, twenty feet of film may be exposed without rewinding. Steady, spring tension provides for evenness of exposure.

The lens is an F/6.5 especially designed for this



THE NEW MODEL CINÉ-KODAK

on the popularity of Kodak snapshooting, it is predicted. The popularity of home-movies, according to the announcement, has been proved and, although the more serious worker may still prefer the present electrically driven Ciné-Kodak, the new, more compact model, will appeal to the world of amateurs at large.

This latest achievement is a thoroughly practical motion-picture camera reduced to the same compactness and simplicity of operation that have made the Kodak famous. With its genuine leather-covering, it has the appearance and is about the size of a 3A Kodak closed. It takes ordinary Ciné-Kodak film (16 mm. wide) in 50 or 100 ft. lengths, is daylight-loading and spring-driven. The film is made reversible, that is, through a special process the negative is reversed to a positive and the film actually exposed is used for projection. This eliminates cost of additional film

camera. It has a focal length of only 20 mm. (less than 1 inch) which gives a broad angle and permits the photographing of large objects at relatively close range. "Close-ups" can be made at 4 ft. and distant views can follow with no focusing-adjustment. Further description is contained in the announcement. The weight is given at 5 pounds when filled, size $8 \frac{13}{16}$ inches long by $5 \frac{9}{16}$ inches high and $3 \frac{1}{16}$ inches wide, and is therefore easily carried. It can be brought into action as quickly as any Kodak and a tripod is not necessary as the illustrations show.

Indicators on the outside of the camera are convenient helps to the operator. An exposure-guide on the diaphragm-scale shows which of the four stops to use under various conditions. A footage-indicator automatically tells how many feet of unexposed film are left in the camera. The film-reels are opposite



3A KODAK AND NEW CINÉ-KODAK

each other and can be easily filled in daylight. Threading can be done very quickly. Pull-down claws in the gate automatically adjust themselves to the perforations in the film. The guide-bar is at an angle, allowing the film to be wound on the reel without danger of jamming or of loose-winding. Studs in the door prevent closing the camera if the loading of the film has not been correctly done. The curved gate holds the film accurately in focal plane without danger of abrasion or scratching and also eliminates the necessity of frequently cleaning the gate. The exposure-lever may be locked in operating position so that the operator may place the camera on a firm support and include himself in the action of the picture.

As this new model uses the same film as the original Ciné-Kodak, no duplication of stock on the dealers' shelves is necessary. It is 16 mm. wide, of safety stock, and instead of the usual printing operation, the negative, through a special process, is reversed to a positive, so that the identical strip of film that was used for exposure is used for projection as well—an emphatic economy of operation.

The company announces that while it is not in position to fill immediate orders, plans are well under way to begin deliveries toward the end of the present month and to produce in quantities by mid-autumn.

Only last week tests were made of a new process in aerial photography, developed by the Eastman Kodak Company in co-operation with the Army Air Service which Dr. Burka, government physicist, described as the most important advance yet made in aerial work. This new achievement in the field of amateur motion pictures shows how thoroughly the great Rochester industry is advancing the work of photography along all lines. There is no question but that photography is becoming more and more a part of the economic and even social life of the world. It matters little whether the pictures be in motion or still; in either case, photography has become virtually a necessity.

Popular Kinematography

MOTION-PICTURE photography is definitely established as a form of amateur photography. There have been thousands of dollars spent in reaching this point and it would not, perhaps, be amiss to look back very briefly over the paths which have been traversed up to this time.

Photo-dynamic properties of different substances have been noted since ancient times. However, this was only a bit of academic knowledge until a group of experimenters produced a photograph. Daguerre is popularly accredited with being the first to formulate a practical system for this work. In this first work the negative was made upon a black or dark surface so that by reflection a positive was obtained. From that point the development of the art progressed until the negative was made upon a transparent base and a second photographic operation, that of printing, gave us a positive capable of indefinite reproduction.



THE NEW CINÉ-KODAK IN ACTION

While the glass-plate was the standard base, some experiments were made in the field of motion-picture photography. The old animated toy, the Zoetrope antedated photography, and this principle of interrupted vision and substitution of pictures was utilised from the first as the basic law of cinematography.

The classical experiments of Muybridge, performed with glass-plates exposed in different cameras, was the beginning from which has grown modern cinematography. His entire picture required but a few seconds to run, and was made practical by continuous action; thus a horse made a single leap, this, run successively and continuously, gave the illusion of a galloping horse. This experiment was of purely scientific interest.

The next step was the perfection of a flexible celluloid base for the emulsion. This was made with a view to providing a light and portable still camera; but, nevertheless, it would have been impossible to develop motion photography to its present high standard without some flexible base. This is obvious.

From this point, with the work of Muybridge as a basis, the development of the motion-picture was a problem of mechanics only. Suffice it to say that the first successful pictures as we conceive them, were shown in Richmond, Indiana, June 6, 1894. They were shown by C. Francis Jenkins, the true inventor of the modern motion-picture.

From that date the development of the motion-picture has been gradual, but constant. It developed into a dramatic industry involving the expenditure of millions of dollars. The superiority of the motion-picture has always been recognised; but the cost of both apparatus and film was so great that, as a means of popular photography, it was a complete failure.

Many manufacturers recognised this point and many cameras were built for the amateur. These had constructional weaknesses, of course; but these would have been overcome. The true cause of failure was inferior design. The standard film was accepted as the smallest possible for good reproduction; and, in fact, this position was well taken, for the quality of the available lenses some years ago made even the best pictures just passable. For this reason the manufacturers tried discs, falling plates and other devices. In all of these the maximum length was too short for serious purposes and the producers failed.

Lenses advanced and soon it was found that a tiny positive could be made to produce a good picture upon a small screen. This only suggested to manufacturers that their discs could be made to hold a greater length for a given size. Again trial and failure were experienced; but the failure was more delayed than at first.

Coincidentally, Pathé Freres introduced the smaller film, not as an economical feature; but in order that standard film could not be used in their projectors. Thus the owner of the Pathéscope was forced to use the safe, slow-burning film. This was a great advantage and in the Pathéscope we find the first amateur outfit which saw any popularity. Even here the expense was great as the film was almost as large as standard and the negative-positive printing-operation was necessary. Their success depended greatly upon their extensive library, so the Pathéscope success was a success as a home-projector not as a home-camera.

Now any such mechanism necessitates an available supply of material. Thus a camera to be successful must be of such gauge as to take standard sizes in film. Some manufacturers began to see the light and made small cameras to take a standard film split lengthwise. This reduced the expense seventy-five per cent., as only half the film was used and twice as many pictures per foot were made. But a single-claw intermittent,

acting upon one side of the film only, has never been successful except in the case of such highly perfected and expensive mechanisms as that found in the Akeley camera. This movement also collapsed.

Finally, George Eastman with his vast resources and pioneering spirit introduced the special-gauge film for the miniature camera and by introducing the camera and projector to fit this new film, he established as a standard size the sixteen-millimeter film. This film was made in the standard ribbon-form, the only form which can ever be really popular. Not only did he do this; but at the same time a process of reversal was perfected which obviated the printing-process. Thus it has been possible to sell two hundred and fifty equivalent feet of film, including all photo-finishing charges, for the nominal price of six dollars. Standard film of the same length would represent a minimum expenditure of twenty-five dollars, and, usually, even more.

Thus the ribbon-film was made the standard form for amateur cameras and the sixteen millimeter the standard gauge for most of such cameras. I am convinced that the ribbon will always be the standard form; but it is to be expected that various sizes will be introduced. Thus the Pathé Freres have introduced their nine-millimeter film, which will undoubtedly prove popular due to the low cost of the outfit. The film is just about as expensive as the sixteen-millimeter gauge when compared upon a screen time-basis, the only fair basis of comparison.

At this time the Bell & Howell Film, the Eastman Ciné Kodak and the Victor Ciné Camera are the leading sixteen-millimeter cameras, and the Pathé the only widely known nine-millimeter camera available. In a later chapter we shall consider these various instruments from a technical standpoint.

The New Form of Entertainment

HUMAN nature seems to be unable to be satisfied or contented for any great length of time. No sooner is some new activity or amusement well entrenched in the public mind than the enthusiasm begins to cool and there is a demand for some other "thrill". We have had the radio and the crossword-puzzle craze. There has been Mah Jong and the ouija-board; but very soon it may be the home "movie" show. Were this form of home-entertainment dependent on the skill and technical ability of the amateur, there might be some question; but, according to the leading makers of amateur motion-picture outfits, one may obtain educational, travel, comic and dramatic films at moderate rental. Many of the leading players are featured in these films; and it is possible on a cold winter-night to remain cosily at home and witness Douglas Fairbanks or Charley Chaplin doing their stunts, exactly as they do them in the picture shown at the theater.

Were this form of entertainment confined entirely to comedy or drama, it might not be so good for the children; but we understand that special pictures of interest and educational value for children may be obtained. We suggest that our readers look into the matter. An amateur motion-picture projector may be a small price to pay to keep the young folks at home.

Another opportunity offered by the home motion-picture show, if one has been successful at all, in making personal pictures of travel and vacation experiences, is to have evenings "at home" when a circle of friends may enjoy with you the interesting events of your holidays. The more the matter is given consideration the more ideas suggest themselves.



THE STEREOPHOTOGRAPHER



(Reproduced Full Size)

THE BEAUTY OF ICE AND SNOW

DUANE P. HOTCHKISS

Stereophotography in Winter

ALTHOUGH the illustration on this page is really too large for good typographical appearance, it was purposely made this size so that lovers of stereophotography might view the picture in a stereoscope and see for themselves what beautiful results may be obtained in winter. Those who know the wonders of ice and snow, as they may be found in the woodlands, along frozen streams and deep in the mountains, need not be told of the value of stereophotography in winter-photography. To view the delicate designs of ice or snow crystals in relief is an exceptional experience. Then, too, what more exquisite scene can one witness than the deep snow weighing down the dark branches of the evergreens, and the play of sunlight through the woodland corridors. Such a scene in a stereograph is, indeed, a joy forever.

Last winter one of our subscribers sent in one of the most exquisite stereo-pictures that I have ever seen. The subject was a frozen marsh and each reed and spear of marsh-grass was incased in ice. The sun was shining upon this veritable fairyland and the effect upon the observer, as he viewed the scene in the

stereoscope, was really beyond description. All of the intricate ice-tracery was retained and likewise the dazzling brilliancy of the sunshine upon the snow and ice.

Another striking picture which we received was one that showed the results of a heavy frost the night before. Every tree, twig, blade of grass was covered by a frost-mantle. The stereoscopic effect was striking, even without using the stereoscope. One large bush seemed to be literally a piece of Belgian lace, so intricate and fine were the frost-crystals on every branch and twig.

Those who may dread the cold need not leave their homes to obtain interesting stereo-studies in winter. Frost on the window-panes, snow-scenes in the garden, views up and down the street, and even a snow-covered window may be made into a thing of beauty. Often the kiddies at play will provide attractive subjects at one's very doorstep. After all, the matter of obtaining likely subjects depends upon how much the stereophotographer really wishes to use his camera. As a rule, "where there's a will there's a way". Stereophotography in winter can be made a source of much pleasure. Try it this winter.



THE MILITARY PHOTOGRAPHER

CAPTAIN A. H. BEARDSLEY, SIGNAL-RES.



The Economic Value of Military Photography

THE field of usefulness of aerial photography is by no means yet fully explored or developed; but the quality and extent of the work accomplished during the fiscal year of 1925 by the Army Air Service, the expeditious manner in which extensive projects were completed, and the progress made in the perfection of equipment and methods have firmly established its utility as an indispensable military feature and demonstrated its economic value to map-making agencies and various departments and bureaus of the federal government.

During the fiscal year there has been a great increase in the demand for aerial photographic work for military and map-making purposes by the War Department. The Air Service, in addition to the routine necessities of training, has co-operated with all other combat branches of the service in carrying out operations and maneuvers in the field under the various corps-area commands. Although the reconnaissance value of aerial photography has long been recognised, a considerable skepticism has prevailed as to its worth in the making of maps of sufficient accuracy for military purposes of inaccessible areas. The feasibility of making accurate military maps by aerial survey of areas of which there were none or inadequate maps, was convincingly demonstrated in several instances during the fiscal year.

In the Second Division maneuvers, held at Fort Sam Houston in April, 1925, fire-control maps were made from aerial photographs, the control for which was projected from base-lines established within friendly areas. This map was prepared under the following assumptions:

a. That the area in front of our line was inaccessible, necessitating that all control be taken from in rear of that line.

b. That a map having an accuracy comparable with the accuracy of the Field Artillery firing-map would be satisfactory.

c. That the time in which to make a map was limited.

Photographs were made by the 24th Photo-Section over the simulated enemy-areas and the resulting maps were ready for distribution within eighteen hours after the photographs were made.

General Malone stated that the actual firing by the artillery proved the map was satisfactory in every way, being accurate within two miles of deflection and to one probable error in range. Road-reconnaissance mosaics were also prepared for practice marches of the Second Division.

Experiments were carried on in the last eight months by the Air Service personnel at Fort Bragg with the Field Artillery Board in the use of aerial photographs for fire-control. It is found that aerial photographs are as accurate as existing maps in obtaining range and deflection. Report in detail of these experiments is now being compiled by the Field Artillery Board.

Instruction in the utilisation and exploitation of aerial photographs for military purposes is now a permanent part of the courses at the General Service Schools, Fort Leavenworth; the Infantry School, Fort

Benning; Engineer School, Fort Humphreys, and various other service schools. This is a strong factor in educating other branches of the service in the military uses of aerial photographs. Photographic maps of the training-areas adjacent to these schools were made by the Air Service during the past two years and are now extensively used in working out the tactical problems and maneuvers involved in the school-training and for familiarising the classes of student-officers with interpretation of natural and military features contained in aerial photographs. With the adoption of the 24 x 24 copy camera as standard equipment of photo-sections, methods were perfected for the rapid reproduction of these mosaics to original scale and detail on 20 x 24 sheets with superimposed grid, equal in technical standards to the military and fire-control maps made by the Corps of Engineers.

In addition to the co-operation with other branches, photographic mosaic-maps of many tactical and strategic areas of the United States for the Corps of Engineers and extensive projects for the Board of Rivers and Harbors have been completed. By far the greatest demand for aerial photographs during the fiscal year, however, emanated from federal agencies outside the War Department, practically every federal bureau being represented in these requests.

A study of the list of projects carried out during the fiscal year for these departments shows that there is a great increase in the variety of uses for which the aerial photographs are desired. The greatest demand, however, has been for photographs for purely map-making purposes. The methods of utilising aerial photographs in map-making have become standardised during the past year to an extent that makes for greater economy in the production of maps from data provided by unassembled multi-lens photographs. Under the old system, elaborate nets of primary control spread by ground work over the areas to be mapped were considered necessary preliminary to the photographic work. By the new and more economical method, a net of secondary control is established from points located in the photographs themselves, which is satisfactory for standard practice where there is a moderate number of primary control points available.

Aerial survey, based on extensive projects carried out in the past year, is estimated by the U. S. Geological Survey to create a saving of from 35% to 75% in the cost of making and revising maps as compared with the cost by ground-survey alone, and cuts the time required more than 50%. The decision of the Topographic Branch, U. S. Geological Survey, to give preference to aerial photographic mapping so far as possible in carrying out the provisions of the Temple Bill program for mapping the entire area of the United States within twenty years, is the most noteworthy evidence that aerial survey has passed from the experimental stage. The stage to which this development has attained is due almost entirely to the experimental development work carried on by the Air Service in co-operation with the Corps of Engineers at the Engineering Division, McCook Field.

During the fiscal year approximately 15,000 square

miles were photographed for the War Department and federal bureaus for map-making purposes alone. Through this continuous peacetime aerial survey-service, the Air Service obtains valuable and necessary potential training for war, develops and perfects equipment and methods, and supplies aerial photographs for mapping-purposes, annually saving the government thousands of dollars over the cost of maintaining the photographic sections. As an illustration of the increased demands upon the Photographic Branch, reference is made to the mapping-program submitted to the Chief of Air Service by the U. S. Geological Survey for the fiscal year 1926. The total area desired photographed approximates 45,000 square miles—more than the whole area photographed for that department in the last four years. From data furnished by the Geological Survey, the estimated savings on this program alone will amount to approximately a million dollars, whereas the funds appropriated for the purchase of photographic equipment and supplies for all Air Service purposes average less than \$150,000 annually. This estimate, of course, does not include the cost of airplanes and flying-equipment.

The present wide application of aerial photography is entirely due to the efforts of the Army Air Service, as it has constantly devised and demonstrated new fields of usefulness for the various types of photographs made from airplanes and has fostered and assisted the commercial development in every possible way.

In conference with the Director of the U. S. Geological Survey on the subject of the Temple Bill program, it was stated that the Survey will map or re-survey practically the entire area of the United States. Less than one-half of the 3,000,000 square miles contained in the continental limits are mapped, and existing maps of practically all of the balance of the area need revision. In order to exercise the fullest economy in cost and time, the Survey will need aerial photographs of approximately 2,000,000 square miles of this territory. As there is no existing organization, either military or commercial, which is trained or equipped to carry out such a colossal project except the Army Air Service, it will be called upon to assist to the limit of its resources of personnel and equipment. The director of the Survey believes that the cost of placing the work on contract with commercial aerial photographic concerns would be so high that the savings in cost over ground-survey would be negligible. In the event, therefore, that the Army Air Service is unable to furnish the fullest co-operation, the only alternative will be for the Geological Survey to endeavor to establish its own aviation mapping-services.

Only eight of the photographic sections in the United States are equipped with multi-lens mapping-cameras. Provisions have been made on the approved procurement schedule for 1926 for the purchase of sufficient additional cameras to equip all sections. By the end of the summer training-season, all photo-sections will have trained and qualified photographic officers in command. It is believed that these officers, with such assistance as may be obtained from pilots and observers of observation-squadrons in flying photographic projects, will be able to carry out the necessary aerial operations.

The fifteen photographic sections in the United States, if maintained to full strength, will be able to fulfill the laboratory-operations necessary to keep abreast of the annual requirements of the Geological Survey and priority projects for the War Department, in addition to their routine duties. The prime factor of interference with this schedule, however, is the

present summer training program. During the period from June to September, when atmospheric and climatic conditions are best for aerial photography, most photo-sections are engaged in giving instructions at the various corps-area training-centers to Reserve, National Guard and R. O. T. C. units, and their laboratories and personnel are therefore not available for other work.

The situation as regards necessary airplane-reserve is not so favorable, as the special remodeled DH photographic ships at present under production will about supply replacement for the planes now assigned to sections and which are, in most cases, near the limit of their service. After these ships are worn out reliance only can be placed in such numbers of the Davis-Douglas observation-type as appropriations may make available.

During the fiscal year laboratories for the 20th Photo-Section at Langley Field, and the 24th Photo-Section at Fort Travis were constructed by remodeling old wooden buildings, and the eighteen photographic sections in the Air Service are now housed in sufficiently equipped buildings to carry on the laboratory work of the sections in a fairly efficient manner. Most of the laboratories in the United States, however, are contained in wooden buildings that were built for other purposes during the war. These buildings do not provide proper space and arrangement for the most satisfactory operations. Ceilings are low and sufficient space is not provided for the proper installation of the new equipment for reproduction and map-making purposes. No means are available for obtaining proper ventilation or temperature control of darkrooms. These wooden buildings are rapidly deteriorating and the cost of maintaining them in a habitable state of repair increases from year to year.

A program for the progressive construction of twelve new laboratories to replace these wooden structures during the years 1927 to 1930 inclusive has been submitted. Plans and blueprints for this standard model laboratory are completed and available. The laboratory will be of fire-proof construction and provided with ventilating, heating, and refrigerating-systems, whereby the temperature of the workrooms may be controlled to suit the season and climate. Space and arrangement will be adequate to take care of all the activities of the Photo-Section, and provide for new developments or increased operations. They will provide better facilities for the instruction of personnel of summer training-camps, and in the event of war can be used as training-centers to supplement the photographic school in the instruction of Reserve and recruit photo-units.

When additional items of laboratory and aerial camera-equipment, now on the procurement schedule of 1926, are obtained, all Photo-Sections will be fairly well equipped. One set of field laboratory-trucks has been constructed and is now undergoing field-tests.

Air Service News-Letter.

Why So Much About the Air Service?

A READER comments that he thinks that the Air Service is getting too much publicity in this department. He asks that other branches of the service be given an opportunity to show their photographic proficiency. Let me say that this department extends a hearty welcome to all arms of the service which use photography; and the work of the Signal Corps would be especially welcome. However, where is photographic work of a high order being done and who is doing it, in addition to the Air Service?



LONDON LETTER

CARINE AND WILL CADBY



PERHAPS the chief item of news in the photographic world is the change of editorship of the *Amateur Photographer*. Mr. Child Bayley has retired and given up his editorial chair—we believe this is the correct expression—to Mr. F. J. Mortimer, F.R.P.S., who, for the last few years, has been responsible only for the illustrations.

The *Amateur Photographer and Photography*, to give it its full title—the result of the fusing of two photographic weeklies into one—has not counted for much in the photographic world, and the striking pictorial reputation it made in the days of the late Horsley Hinton has petered out. But Mr. Mortimer has imagination and energy, and we are confidently expecting it to once more become vital and in touch with modern thought and methods, and above all to evince a sympathy with, and stimulation of, pictorial work.

The "A.P." had striven to help the beginner; but here the Kodak paper rather cut the ground from under its feet, being not only remarkably well edited, but subsidised by a rich firm that knows the needs of the beginner from a to z. Mr. Mortimer is beginning his editorship under good conditions, for September is going to be a month which will teem with photographic activities and interest. The London Salon and the Royal Photographic Society hold their exhibitions then, and this year there is to be an International Exhibition of Professional Photography for which Princes, one of our finest galleries, has been secured. It is hoped that this show will serve two purposes, *viz*: to celebrate the Centenary of Photography, and prove that there is not much the matter with professional photography in this country. It will remain open from September 1 to 19; and, being backed by the interest and driving-power of the president (Mr. Haines) and the energetic officers of the Professional Photographers' Association, is likely to be a great success.

The new president of the British Optical Instrument Manufacturers' Association (Mr. F. Twyman) in his presidential address had good and bad news to communicate. The industry showed examples of losses made for five successive years; of dividends missed for ten years, and the liquidation of three important firms out of twenty or so of which the industry consisted. Yet, there was marked advance in many directions, camera-lenses being one particular field in which British superiority had been demonstrated in a marked degree. Among novel cinematograph machines we had produced one that was capable of making 4,800 pictures a second, a speed that can clearly follow the effect of the impact of projectiles on armored plate. How the old-fashioned pictorialist must envy the facility of such an instrument. We have ourselves worked all day at landscape and occasionally come home with all our plates unexposed. But with the capacity of 4,800 shots a *second*—one has to pause to realise the velocity—some, at least, one might hope, would be satisfactory, even if one only worked for a few minutes!

An announcement appeared in *The Times* last week that there would be an exhibition of spirit-photographs at Abbey House. This, thought we,

should certainly not be missed by photographers who were interested in psychic matters. From a photographic point of view the gallery made a disappointing impression: enormous enlargements of unretouched sitters, photographed in uncomplimentary lightings and bad technical work jarred on our taste. Very foolish, no doubt, to let this material and unimportant detail influence us; but it could not be helped. In many of the photographs, the face of the "extra"—a singularly unsympathetic term for a spirit, we thought—was relatively quite out of proportion to the sitter, appearing sometimes as a giant, and at others as a pigmy. Another stumbling-block was that the faces of the extras in so many cases were surrounded by what looked like wool. Halation, the reader may suggest, thinking of a radiating light, but this was much more solid material in hard bulges, in no way resembling reflected light.

One photograph had special interest for us, being made by Mr. J. Trail Taylor, the former editor of the *British Journal of Photography*. Here, we thought, we should find something illuminating; but it was one of the least convincing. Many of the photographs were made in the last century, and most of them seemed to come from America. Sir Arthur Conan Doyle has worked hard to get the collection together and has hoped the photographs will be convincing evidence; but the photographic mind rebels at what seems in so many cases downright bad work.

In talking it over we decided we might have appreciated them more had we possessed less technical camera-knowledge. It is only too easy to ridicule what we cannot understand, and we determined to keep an open mind with regard to these manifestations, which those with better brains than ourselves regard as coming from another sphere; but it would greatly help the outsider if well-known photographers were responsible for the pictures.

"Cinema Productions, Ltd." is the name of a new company proposed by Sir Oswald Stoll with the idea of the establishment of a self-supporting business unit in the British film-industry which could provide a market in which to distribute its own pictures. There would, of course, be a producing-organisation, and two hundred and seventy theaters would be necessary to support the minimum output of pictures that would keep an efficient studio going. It is to be hoped, if the scheme is accomplished, that there will be a better program than the present one at the ordinary run of theaters, for many people have entirely forsaken "the pictures" unless there is a special bill, because the usual show is so very poor.

The Professional Photographers' Association is using all its influence to stop free sittings; and it is sure to succeed in the end because time will prove that it is not a business-proposition to outlay in this direction, as human nature is at present constituted. If we were as we should be, no one would accept a man's work and time without in some way making it good to him. But most of the society women and actresses that take advantage of this unorthodox proceeding are quite ruthless. We came across a young girl recently who visited the leading professional

photographers in Bond Street, mentioning her father's name—he happened to have an insignificant title—and boasting afterwards that she had obtained three free sittings. We were interested in the development of her scheme, and as she was a neighbor we were able to follow it up. The proofs duly arrived, retouched, finished and actually mounted. She kept them all; but in no instance did she order more, or even recommend the firms to her friends, to whom she gave the pictures, and there was an end to it. We read last week in a daily paper that free cameras are being offered to readers, also a £1,000 prize, which is to be won in the use of them. But one learns, on one's way through life, to distrust anything that is offered for nothing. It usually means that one must pay more heavily in the end, and so we have not written for further particulars.

COMING EXHIBITIONS

AUGUST 29 to SEPTEMBER 26, 1925. The Second Midland Salon of Photography to be held in the Art Gallery, Birmingham, England. All particulars and entry-forms may be obtained from the Honorable Secretary, Capt. F. C. T. Hadley, Houndsfield, Hollywood, Birmingham.

SEPTEMBER 14 to SATURDAY, OCTOBER 24, 1925. Seventieth Annual Exhibition of the Royal Photographic Society of Great Britain, 35 Russell Square, London W.C. 1, England. Last day for receiving prints Friday, August 14. We have entry-forms and shall be glad to mail them as long as they last, to any readers who will send two cents in stamps for postage.

NOVEMBER 1, 1925. New Zealand Photographic Salon, Dunedin, under the auspices of the Arts Committee of the New Zealand and South Seas International Exhibition, 1925-26. The Salon will be housed in a specially equipped building. Last day for receiving prints, October 15, 1925. Entry-forms may be obtained from the High Commissioner for New Zealand, 413-5 Strand, London W.C. 2, England, or from H. M. British Trade Commissioner, 285 Beaver Hall Hill, Montreal, Canada. We have a few entry-forms which we shall be glad to send to any of our readers.

DECEMBER 19, 1925 to JANUARY 10, 1926, inclusive. First Italian Salon of International Photography, Turin, Italy, under the auspices of the Gruppo Piemontesse per La Fotografica Artistica and of the Societa Fotografica Subalpino at the Galleria Centrale d'Arte, via Pon. 4, Turin. Last day for receiving prints is November 15, 1925.

DECEMBER 1, 1925. Maryland State-Wide Photographic Competition under the auspices of The Photographic Club of Baltimore City, 105 West Franklin Street, Baltimore, Md. Last day for receiving prints December 1, 1925. This competition is open to any amateur who resides in the state of Maryland, and all members of the Photographic Club of Baltimore. Further particulars may be obtained from The Print Director of the club.

JANUARY 4 to 31, 1926. Ninth International Salon of Photography will be held under the auspices of the Camera Pictorialists of Los Angeles, at the Los Angeles Museum; entry-forms will be mailed, or may be had by writing to N. P. Moerdyke, Secretary of the Camera Pictorialists of Los Angeles, 811 Washington Building, Los Angeles, Cal. Last day for receiving prints December 17, 1925.

That Grade Crossing on Page 220

QUEER looking road—don't remember ever seeing such a road—sort of a triangle—wonder what was the object in having it so wide and letting it taper off so suddenly—train isn't very far off, and the road must be almost as wide as the train is long—marvelous road—wonder where they make such roads. . . . (When will pictorialists stop using short-focus lens to distort landscapes?)

Grade-crossing ahead—will take your word for it—little to show that fact in the picture—looks as if the road turned to the left away from the train. . . . (If the photographer wanted to show a grade-crossing ahead, why didn't he present it in evidence?)

Wonder what sort of material that road is composed of—looks like snow—no texture to indicate the contrary—may be sand—black specks in sand—how did they get there—same material in the grass at the right—must be sand—no, maybe snow—well, I dunno—give it up. . . . (Meters don't cost much, but are very useful.)

Wonder what Mr. Miller had in mind in making that picture—rather commonplace subject—no inspiring message—nothing instructive, entertaining or inspiring—rather commonplace—genre and not well done at that . . . well, that's why film and plate-makers get to be millionaires.

Critic dyspeptic—got a drygoods bill this first day of August that puts him in bad humor—manuscript returned by publishers with thanks? Not at all—is feeling fine, only—

Well, turn back a couple of pages of this August issue and look at Singer's, "Washington Bridge" or Mellinger's, "Chicago River", or O'Neil's, "Bronx River"; there are ideas, there is beauty, there is thought; that is to say, these people used photography as a medium to convey to the mind of the beholder the ideas and thoughts that were in their own minds. Good photography is simply a means to an end. Of course, photography can be used simply as an amusement, as a souvenir of scenes interesting only to the photographer: little Lizzie, Uncle Tom, the old house we used to live in when we were children, old dog Fido, Ma's new automobile and that sort of thing. One glance at that kind of picture is enough, often more than enough.

But a thing of beauty is a joy forever, as the poet has truly said. Look at that sky and those trees in O'Neil's "Bronx", referred to above. You look at it, today, you look at it tomorrow. Every time you look at it, it gives pleasure and satisfaction (I wish the river were a trifle more in evidence, however). That is photography used as a means to an end. That is Art, with a big A. That is worth while.

Now no man can use media or materials without mastering the technique of his art. The photographer must study his materials and the possibilities of his media. Otherwise he fails. For instance, take that picture under review: the Grade-Crossing. If the author had taken the trouble to look into the ground-glass, he would have noticed the distorted perspective and would have rejected the picture forthwith. If he had used a meter to gauge his light, his exposure would have been correct. If he had studied his subject carefully before making that particular view with the object of conveying a definite idea or impression, he would have rearranged his viewpoint or gone elsewhere. Before making a picture, the amateur ought to ask himself: Just what am I trying to do? The next question is: What materials have I available and how shall I use them to accomplish my purpose?

E. L. C. MORSE.



HERE, THERE AND EVERYWHERE

To ensure publication, announcements and reports should be sent in
not later than the 5th of the preceding month.



Photographs and Photostats of Naturalisation Certificates Prohibited by Law

PHOTOGRAPHERS have been requested from time to time to make photographs or photostats of certificates of naturalisation. These have been obtained for the purpose of submitting evidence of citizenship, of the persons holding a certificate, to Government Departments or to relatives abroad; particularly in those cases where efforts are being made to obtain the admission to this country of alien immigrants.

The Federal Penal Code prohibits under heavy penalty the printing, photographing or causing to be printed or photographed any print or impression in the likeness of a certificate of citizenship. Violation of the law is punishable by a fine up to \$10,000, or by imprisonment up to ten years, or both.

The evidence presented to the Commissioner of Naturalisation, Washington, D.C., shows that such prohibited copies are frequently being made by photographers who are unaware of the fact that it is prohibited by law. This warning is given publicly in order that photographers may be on their guard.

Could the Camera Have Done This?

How a painter revealed a woman's insanity by painting her portrait and so enabled her own physician for the first time to diagnose her malady, is a story told in the memoirs of Sir Squire Bancroft.

The woman was an American, daughter of parents of great wealth and position, who had puzzled her family and physician. It was decided she should live abroad a year, and in London she conceived the idea of having her portrait done by an artist, whom Bancroft calls, "A magician who reveals unknowingly what have been hidden mysteries." The portrait was sent home and her parents were delighted with it. They invited friends to a home-view. Among them was the family-doctor. He gazed at the portrait long and earnestly, Bancroft relates. He left the house perturbed and sad. The following day, he sought an interview with the woman's father and told him that the painter had revealed to him what he, himself, had failed to discover. The poor girl died afterwards in a madhouse.—*Boston Transcript*.

Crop Census-Taking by Aërial Photography

A NEW mission for aërial photography sprang into existence recently when representatives of the Department of Agriculture requested the aid of McCook Field in obtaining, by airplane, pictures of Ohio fields. These photographs will be used in an endeavor to obtain by a simpler method than has ever been tried before, statistical information regarding the percentage of the State's acreage of different planted crops. This information is necessary for the purpose of making crop-predictions.

Former methods have involved interviewing farmers as to the amount of their land planted in wheat, corn, oats, truck gardening produce, etc., or driving about the country actually measuring off the fields. Either

system of taking this census has been slow, burdensome and expensive. The new idea is to make pictures from the air and make measurements from a set scale.

As an experiment in finding the most practical height to make these pictures, exposures were made at altitudes of 2,000, 3,000, 4,000, 5,000 and 6,000 feet. The advantage of the high altitude is the amount of acreage possible in one photograph, but the exposure must not be so high that the identification characteristics of the different crops is lost.

On July 22, Mr. Lockwood, test-pilot at McCook Field, piloted Lieutenant Plank in the photographic plane (DH4BP) to make the first experimental photographs. Lieutenant Hutchinson with Mr. C. J. West, the Ohio representative of the Department of Agriculture, and Mr. Lloyd, the editor of the *Ohio Farmer*, accompanying the photographic plane on the Honeymoon Express (DH4B) airplane. The weather being favorable, excellent pictures were obtained and turned over to the Department of Agriculture for further action.

Should this airplane-photographic method of crop census-taking be adopted, the saving in time and expense would be almost incalculable, and the issuing of crop-predictions could be accomplished at a much earlier date. If it is successful, it is only logical to suppose that it would become national in scope—and another set custom will have given way to the revolutionising qualities of the airplane.

Brooklyn Institute Announcements

THE Department of Photography of the Brooklyn Institute of Arts and Sciences will begin its winter-activities promptly the first of October. Mr. Zerbe will conduct his classes in the rudiments of photography in two sections. The beginners will meet on the first and third Tuesdays and the advanced class on the second and fourth Tuesdays. Mr. Zerbe is on the photographic staff of the *New York Herald-Tribune* and has long been known for the pictorial and pictorial excellence of his work, as well as for his ability to transmit his own enthusiasm to new workers.

Miss Sophie L. Lauffer, the vice-president of the Department, will again conduct a class in advanced pictorial photography with special emphasis on portraiture and composition. This class will meet on the first and third Thursdays with an afternoon portrait-session one Saturday of each month. It has been arranged that anyone working for a Master's degree through the Institute may receive credit on the degree from this course. All of these classes are open to non-members of the Institute and further information regarding them may be obtained from William A. Alcock, 34 Wall Street, New York City.

Mr. Zerbe will also conduct a series of interesting public demonstrations on ten Friday nights during the season and a schedule of these will be sent upon inquiry to anyone interested to attend.

A series of one-man exhibitions is being arranged, the exhibitor for October being Harry A. Neumann, who is best known for his excellent kallitype prints. This show will be open to the public on Monday nights beginning October 19, and will be followed in November by the work of Arthur Muray of New York.

Venus de Milo Never Had Arms

It may be some consolation to art-lovers throughout the world, who have wondered in what position were the missing arms of the famous Venus de Milo statue in the Louvre, to learn that even the ancients themselves were perplexed on this point. Dr. Eddie, a French physician, has made known that during a recent visit to Egypt he came into possession of a small bronze statuette of the same period as the Venus de Milo. This statuette is an exact copy of the famous Venus, and, like the original, it has no arms.

Dr. Eddie therefore concludes that the Venus de Milo never at any time had arms, and he believes that the sculptor, when he had carved out of the stone such a divine form, gave up all idea of adding arms. When the Venus de Milo was discovered on the island of Milo (Melos), a large reward was offered to anyone who could find the arms; but in spite of extensive search, nothing was discovered.

Picture and Gift Journal.

Another Photographic Tour by Captain Stevens and Lieutenant Macready

CAPTAIN A. W. STEVENS, Air Service, who just recently returned from an aerial photographic mission with the Alexander Hamilton Rice Expedition in Brazil, and Lieut. John A. Macready, of altitude and non-stop transcontinental flight fame, left McCook Field, Dayton, Ohio, recently on a photographic trip which will take two to three months to accomplish. Their DeHaviland airplane, equipped with the latest design photographic apparatus, will be used in making aerial views of practically all of the scenic points of interest in our western states.

This is not a new mission for these two officers, as on a former trip they succeeded in obtaining some wonderful photographs of theretofore inaccessible places—aerial views which lacked only the coloring of their natural setting to reveal the beauty of our western heights and canyons.

Their itinerary this year is an extensive one, following a main route with occasional side trips for the camera's eye to record the scenic wonders that lie to each side. After arriving at Chicago at the beginning of the trip, they will follow the Air Mail route to Cheyenne, Wyo. From Cheyenne a side trip will be made to photograph Rocky Mountain National Park, the flying-field at Denver and Fort Collins, Fort Morgan, Fort Lupton, and Fort D. A. Russell. If weather conditions are favorable, and visibility and the absence of clouds permit, photographs will be made of Pike's Peak. From Cheyenne they will fly to Rock Springs, thence to Pocatello, Ida., and through Yellowstone National Park to obtain views that were missed on their former trip, due to clouds.

The rest of the proposed flight reads like a vacation-tour—Boise, Ida., to Kalispell, Mont., from which point a flight will be made to and through Glacier National Park; thence to Seattle to photograph Mount Rainier, and then to Portland, Ore.; Crater Lake National Park; Mount Shasta, with a landing at Redding, Calif. A stop will be made at San Francisco to develop the films, then on to Sacramento, Yosemite Park; and with a stop later on at San Diego to overhaul the airplane. Flying from Las Vegas, Nev., Zion Park and Bryce Canyon will be photographed; thence to Holbrook, Ariz., following the Grand Canyon of Colorado. Views will be obtained of the Hopi, Navajo and Apache Indian Reservations, and on the return-trip to Dayton, photographs of the landing-fields passed over will be thrown in for good measure.

As may be seen, this is an interesting project, indeed, but it is one which requires skill in its accomplishment. With this in mind, we look forward to their return in about three months with a goodly supply of very interesting photographs.

Pictorial Photographers of America

THE seventy-eighth open meeting of the Pictorial Photographers of America will be held at the Art Center on Monday evening October 5, 1925, at 8.15 P.M. The meeting will open with a private view of an exhibition of prints by members. This exhibition will be our contribution to the Annual October opening of the activities of the Art Center.

The print-committee announces a new form of member's exhibition for October—only. Send one print, and only one, and the print will be hung, unless too many are received for the space available, in which case the committee will make a selection. As the four walls of our gallery will be used for the exhibition, this is your opportunity to see that print hung that you feel deserves the honor, even though juries have disagreed with you. All prints must reach Mr. Ira Wright Martin at the Art Center by October 1. Please send return postage with your print.

Subject for the November competition—"Landscape" showing a building or a structure of some other kind. Prints must reach Mr. Martin by October 29. Mount all prints on white or light-toned mounts and include return postage. The Annual Election of Officers will take place at the November meeting.

We will have no scheduled speaker for the October meeting. It will be a "Get-together" night. Bring not to exceed six of the most recent pictorial prints you have made. Show them and tell us the conditions under which they were made. Light refreshments will be served. Come and help make it a good meeting.

ARTHUR NILSEN, *Secretary.*

Of Interest to News-Photographers

FRANK A. EATON has resigned from the staff of the *New York Herald*, after nine years as Sunday Rotogravure and Daily Picture Editor, to become manager of the news-picture division of Underwood & Underwood, Inc., of New York.

Mr. Eaton was previously chief of the Copy and Art Department of Hanf-Metzger, Inc., New York, before which he was in the advertising-department of the Philadelphia *North American, Bulletin and Record*.

Underwood & Underwood, Inc., is increasing its news-picture division, with added representatives both in this country and abroad; and enlarging the scope of the division to handle added types of news-picture services to newspapers, magazines and other publications, and to national advertisers.

"Why Is It?" Asks Mr. Baumgaertel

IN the September, 1925, issue of *The View Finder*—that interesting and inspirational house-organ of the California Camera Club, San Francisco—there is a column which is conducted by Mr. Karl A. Baumgaertel and is called, *In Focus*. Here may be found many a pointed comment to stir the mind and to stimulate progress. In the issue before us, Mr. Baumgaertel writes as follows:

"One thing that is difficult to understand is that with all the members we have, the photographic magazines

in our library are so little read. We have in our midst many members who are thirsting for photographic knowledge, not one of whom ever touches any of the current publications except, perhaps, to move them out of the way when he wants to read the latest scandal in one of the yellow journals. In view of the fact that the careful reader can get more real good out of one issue of our photographic publications than he can through any other way, this seems very strange."

Then, Mr. Baumgaertel takes all the photographic magazines in turn and points out, in the contents of each, how much helpful and practical information there is to be found. His analysis of each publication is excellent and proves that he appreciates the editorial policies and slightly different viewpoints of the respec-

The Film-Side of Eastman Cut-Films

In our August, 1925, issue, page 117, there appeared an article with regard to the difficulty of being sure of the film-side of Eastman Cut-Film. In order to help clear up the matter, for the benefit of all concerned, we obtained some instruction-sheets which are placed in all boxes which contain Eastman Professional and Cut-Films. With regard to telling which side is the film-side, the instruction-sheet says: "Two V-notches will be felt in one edge of each film. This is a guide for determining the sensitised side. When the film is so placed that the notches are on the upper edge and at the right-hand corner, the emulsion or sensitised side is face up." We hope that these suggestions will be found of service.



VIEW OF THE MALTA SALON

tive editors and publishers. The fact remains that all are trying to build up and sustain interest in every branch of photography and that camera-club members do not avail themselves of the opportunities offered by the photographic magazines.

Naturally we were interested in what Mr. Baumgaertel had to say with regard to our magazine. We quote:

"Take for instance PHOTO-ERA MAGAZINE. The August issue has some very fine articles, among them one on camera clubs which could well be read by every member of the California Camera Club. Another interesting feature of this worthy magazine is its monthly competitions. Incidentally, our own Jack Vildensky has won three first prizes in the last five or six competitions of this publication."

We take this opportunity to urge other camera-club members to participate in our competitions. We try to make our competitions interesting and helpful.

Pictorial Exhibition in Detroit Theater

THANKS to Mr. Mark W. Stevens of Detroit, Michigan, we are able to call attention to an exhibition of pictorial photography which was held recently on the mezzanine floor of the Bonstelle Playhouse, Woodward and Eliot Streets, Detroit. Miss Jessie Bonstelle, the managing director, believes in making the theater more than merely a form of entertainment. To that end, she has arranged, and held, a series of art-exhibitions in her new theater, ever since its doors were opened last January. The work of Hopkin, the marine painter, and Barlow, both of Detroit, has already been hung. It is much to Miss Bonstelle's credit that she considers pictorial photography as one of the fine arts and invites the pictorialists of Detroit to exhibit their work in her theater. Is this not a splendid example, worthy of emulation by other progressive theater-owners and managers?



BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices. Send for our list of approved books.

TOWLES' PORTRAIT-LIGHTINGS, A Practical Method for Making Photographic Lightings, by Will H. Towles, Past President of the Photographers' Association of America and Director of the P. A. of A. Summer School. 103 pages, 44 photographic illustrations and 37 diagrams. Price, cloth, \$5.00. Philadelphia: Frank V. Chambers; London: Henry Greenwood & Co., Ltd.

This new book by Will H. Towles has been sorely needed by amateur and professional portrait-photographers. Those who have been privileged to hear Mr. Towles' lecture and to see him at work know that he applies, in his own studio, the practical methods of which he writes. He is a practical portrait-photographer and a true artist. In the pages of his book, he has laid a sound foundation upon which it will be safe for ambitious photographers to build. By means of text, illustrations and diagrams, Mr. Towles points the way clearly and convincingly. By following his hints and detailed instructions, it will be found possible to master and to apply his sound methods to the everyday requirements of the studio. He deals with the subjects of Plain Light, The Use of the Double Light, The Silhouette, Short Light and Various Kinds of Lighting. By means of diagrams he shows the exact position of the sitter, source of illumination, screens and camera. The photographs used to illustrate the volume are splendid examples of the different kinds of lighting which Mr. Towles describes. No text-book in recent years is so important or so valuable to the portrait-photographer as this new, beautifully printed and truly inspirational book.

AMERICAN PHOTOGRAPHY EXPOSURE-TABLES AND HANDBOOK, by Frank R. Fraprie, S.M., F.R.P.S. 174 pages, 17 illustrations and Exposure-Record. Price, cloth, vest-pocket size, \$1.00. Boston: American Photographic Publishing Company, 1925.

Literally, this new and revised edition of the "American Photography Exposure-Tables and Handbook" is a vest-pocket elementary text-book on photography. In it may be found practical information which every amateur and professional ought to know. In fact, the little book should be in every photographer's hands—or better in his vest-pocket—for there are many helpful tables to which it is very convenient to refer, no matter what subject is to be photographed. The book is divided into two main sections; one devoted to Exposure and the other to Development and Developers. Under the two main headings will be found many paragraphs, and sub-chapters which deal with virtually all branches of photographic practice. In short, beginners, and those who need a refresher course in elementary photographic fundamentals which have to do with exposure, lenses, plates

and films, printing-papers and processes, developing and developers and toning, will do well to obtain this very practical little book and to do so without delay.

TASCHENBUCH DER PHOTOGRAPHIE, Ein Leitfaden für Anfänger und Fortgeschrittene, by Dr. E. Vogel. Revised by Karl Weiss, editor of *Die Photographische Industrie*, *Photographie für Alle* and *Camera Almanachs*. 298 pages, 257 diagrams and photographic illustrations. Price, cloth, 2.80, Mk. Berlin: Union Deutsche Verlagsgesellschaft, 1925.

For those who can read German easily, this revised edition of Dr. Vogel's photographic text-book will be found interesting, practical and valuable. It is filled with information which includes all branches of photography and the modern processes. There are many formulæ, tables and illustrations which are well worth the price of the book.

KUNSTLERISCHE AKT UND KINDER-PHOTOGRAPHIE, by M. Curt Schmidt. 115 pages, 43 halftone-illustrations. Berlin: Union Deutsche Verlagsgesellschaft, 1925.

This volume is one of a series published under the general title of Photographische Bibliothek. To those who are familiar with German, the book will no doubt be of interest and value. It is written for the pictorialist who is interested in figure-studies and the nude. Virtually all the illustrations are of nude or draped male and female models. The volume concludes with a consideration of child-photography, and contains many attractive pictures of children. There is much technical data supplied with the illustrations and the book is well printed.



An Underexposed One from England

"HELLO," said the photo-dealer, as he spotted the local club's crank member, "what can I do for you?"

"It's about these beastly underexposures. I've had some again. Dash it all, I made six negatives yesterday to get a little thing for the Salon, you know. 'Red Roses,' I'm calling it. Very delicate little thing. Well, every bally negative was underexposed again. I worked the exposures out with sensitizer, slide-rule and compasses, checked them with my Watkins, double checked with my Heyde, timed them with the chronograph, and added three and a quarter per cent. to be on the safe side. And then they were all wrong. Now I want to know what you can recommend to help me. I must get the thing right."

"Ha, another little instrument for your museum?" The dealer and the crank were old friends.

"It's an instrument for my laboratory I want, and I don't mind the price. If there is anything designed to assist in the production of perfect technical negatives, I must have it."

The dealer thought a while.

"Underexposure eh? Your pet ailment isn't it? Never give them enough light? You've tried meters, calculators, watches, chronometers, flash-tables and all. You use ultra-fast plates and an F/2.9 lens. Um; but you always stop down to F/64 for detail. Ah, Um, I'm afraid there's only one thing for you; but it won't cost you a penny. I've half a dozen kicking about. Get them from the manufacturers for nothing. Here's one. Take it home and time the next by that." And he handed across the counter—a calendar!

J. R. HALL.



THE PUBLISHER'S CORNER



In the November, 1925, Issue

THERE are times when continued effort is crowned with success. I refer to getting Dr. T. W. Kilmer of New York City—too well known to need introduction—to give us some of his photographic “trade-secrets” with regard to portraiture. The Doctor is by no means unwilling to share his expert knowledge with others; but he is a busy man, and to sit down to give in detail his methods of working was a real effort on his part. Indeed, I feel grateful to him for the co-operation and kindness. I am very sure that readers of PHOTO-ERA MAGAZINE will join me in expressing their appreciation when they read Dr. Kilmer's article in the November issue.

No doubt many camera club-members will be interested in the account of the fall and rise of the Cleveland Photographic Society, Cleveland, Ohio. The trials and tribulations of this organisation and the final victory over every obstacle are told by a man who knows the facts and had much to do with making this club a success. There will be illustrations of pictorial work done by the members. If there are any camera club officers who are a bit discouraged and need encouragement and renewed enthusiasm, let them read this article in the November issue.

It is always interesting to read about the experiences of those who have done something which we might not care to do or lack the opportunity to do. This fact is illustrated by the strong hold which the *National Geographic Magazine* has upon its readers. Through its pages one may travel thousands of miles by land, sea and air, to the remote places of the world, and share the dangers of those who risk their lives to furnish the articles and the pictures we enjoy. Hence, in the hope of contributing something of interest to readers of PHOTO-ERA MAGAZINE, I have written a very informal, non-technical article on my introduction to aerial photography, based on my annual tour of military duty at Chanute Field, Rantoul, Illinois. The article will be illustrated with some pictures which I made with the K-3 Fairchild Aerial Camera at various altitudes. It is my sincere wish that my experience will serve to encourage others to consider aerial photography as a field of activity which is growing daily in economic importance. It is no longer just a dare-devil stunt to make pictures from an airplane. It is becoming an art and a science which has a tremendous future and one which merits the services of an intelligent, well-trained personnel supported by enthusiastic public approval and interest.

Have You Renewed Your Subscription?

YES, this appears to be, and is, a very mercenary question. Frankly, I wish that I never had to worry about subscriptions and advertising to pay the bills. It would be such a relief to edit and publish PHOTO-ERA MAGAZINE without being limited, and often stopped short in my plans, because the best of subscribers and advertisers fail to send along a cheque when it is due. Of course, there are vacations, illness in the family and business-reverses which prevent the usual prompt attention to renewals and advertising-

bills; but in most cases it is just an oversight—a putting the matter off until tomorrow. If our subscribers will realise that their prompt renewals can make possible a happier Publisher and a better magazine in the future, I am sure that all will co-operate at this time.

One thing more. In our testimonial files are many letters from subscribers and readers in which they point out in detail why they like PHOTO-ERA MAGAZINE. They go so far—a number of them—as to say that they are very glad to introduce and to recommend it to their friends. Right now I am going to take these subscribers at their word and ask them to make good. Just a word, here and there, of merited approval and recommendation of PHOTO-ERA MAGAZINE will help to swell the increasing number of new subscriptions which are coming in these days. Even though the magazine is far from perfect, there seems to be something that appeals to those who will take the time to read it and not judge it solely by the illustrations. Therefore, if those who have written me such splendid, helpful letters will say to their friends what they have written to me, then I know that the subscription-season of 1925 will be one of tremendous encouragement to me and a greater opportunity for service through PHOTO-ERA MAGAZINE.

Your Magazine

I AM the magazine you read—
For your enjoyment made;
On every page, from first to last,
My columns are arrayed
In print and picture, all for—you!
That you may pleasure grasp,
Whatever hour, day or night,
My friendly form you clasp.

I am the magazine you read—
My pages give you joy;
I bring the laughter to your lips
Uncoloured by alloy;
I never pause—but carry on
My task of pleasing you,
No matter what my trials may be—
I still come smiling through.

I am the magazine you read—
Yet, when I please you best,
'Tis pleasure often drawn from pain
That burns within my breast;
But, though I suffer, I must smile;
I still must play my part;
Must bring the laughter to your lips,
Though mine—a broken heart.

I am the magazine you read—
For your enjoyment made;
On every page, from first to last,
My columns are arrayed
In print and picture, all for—you!
That you may pleasure glean
While reading me. That's what I'm for!—
I am your magazine!

WILLIAM LUDLUM.



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U. S. S. LOS ANGELES AT BERMUDA
HONORABLE MENTION—REAL SUNRISE AND SUNSET PICTURES
ALLEN FRASER



PHOTO-ERA MAGAZINE

The American Journal of Photography

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Getting Introduced to Aërial Photography

A. H. BEARDSLEY



HIS is a very informal and non-technical account of my recent introduction to aërial photography. When I received my commission as Captain, Signal Corps, Reserve, U. S. Army, I was told that my special field of activity would be in the photographic branch of the Signal Corps. Naturally, I was eager to perfect myself in military photography and to learn more of what I would be expected to do in case of an emergency. For two years I have been trying to obtain a definite and concise answer to the question, "What are the duties of a Photographic Officer and what is he expected to know?" Through Regular Army and Reserve Corps channels, I received much helpful and practical information; but I still felt that I was very far from being able to measure up to the requirements of a Photographic Officer.

At length, I had the privilege to go on active duty at Camp Devens, Mass., under the direction of the Camp Signal Officer and Military Intelligence Officer. This tour of duty proved to be a very valuable experience and I felt that I gained considerable ground. However, I still lacked that feeling of assurance which comes of knowing one's objective and what is necessary to reach it. This past summer, thanks to the co-operation of the First Corps Area Headquarters and 97th Division Headquarters, I was given a tour of active duty at the U. S. Air Service Technical School, Photographic Department, Chanute Field, Rantoul, Illinois. My orders covered a period of fifteen days from July 19 to August 2, 1925. What happened, and whether or not my question with regard to the duties of a Photographic Officer was answered, I will try to record in this article.

The journey from Wolfeboro, New Hampshire, to Rantoul, Illinois via Chicago, was very enjoyable, and the extremely hot weather which

I was told to expect did not materialise during my stay at Chanute Field. I must record the courtesy and kindness which was shown me by Major McCord, Commanding Officer, his Adjutant, Lieutenant Johnson and all the Officers and personnel of the post. I particularly wish to mention the courtesy, patience and interest shown me by Lieutenant Charles Backes, Director of the Department of Photography, and every member of the school staff of instructors, from Officers down to Privates. Upon him and upon them rested the burden of my presence and my questions. I told them all frankly that I had come to Chanute Field to ask questions, and I did. There must have been a sigh of relief when my tour of duty was over. However, never did any of them show the least sign of impatience or lack of interest. For that they deserve greater recognition than I can give them in these pages.

Although for a number of years I have had the reputation of knowing something about photography, let me hasten to say that what knowledge I did possess grew less and less in practical value as I approached the subject of aërial photography. To be sure a lens is used, a film and a developer; but from these familiar landmarks I was soon thrust into a strange photographic country where cameras looked more like megaphones or stove-pipes, where films have to be kept on ice before and after use, until developed, and where twelve and twenty-inch F/4.5 lenses and intricate between-the-lens shutters, peculiar sun-shields and motor-driven film-winding and shutter-setting apparatus leaves the ordinary ground photographer bewildered with it all. Well, let me try to write down my experiences in sequence and thus perhaps attain a greater degree of unity and clearness.

The first step toward my introduction to aërial photography was a tour of all the class-



THE AUTHOR READY FOR A HOP

A. H. BEARDSLEY

rooms and buildings in which photography is taught. My readers will recall the article which appeared in the June, 1925, issue with regard to the Air Service Technical School and its splendid Photographic Department. I remember well reading that article and studying the illustrations; not daring to think that I would so soon find myself to be actually at Chanute Field. In that article a concise account was given of the subjects taught and the equipment at the school, so that I need not repeat this information here. Therefore, let me say that a personal visit to all class-rooms, supplemented by the facts which were given in that article, was the best preparation for what was to follow that I could have had. Thus my first morning was virtually given up to meeting the different instructors and becoming familiar with the location of the various sections which were devoted to negative-making, printing, enlarging, copying, developing, mosaic map-making, chemistry, cameras, optics and other subjects.

The second day I attended a number of lectures which were being given on various photographic subjects. Later I visited the workrooms where the students were doing laboratory-work based on the lectures. One series of lectures on negative-making particu-

larly deserves mention. They were given by Sergeant P. H. Hammer and dealt with all varieties of emulsions, exposure, action of developers, reducing-agents and related subjects. Sergeant Hammer has evolved a carefully planned sequence of drawings and pictures which are mounted in proper order on a long roll of cloth encased in a large cabinet. In this there is an opening through which the drawings or illustrations can be seen, one at a time, by the entire class. As the lecture proceeds, Sergeant Hammer turns a handle and brings into view the particular drawing or picture he needs to illustrate his remarks. The idea is really a complete, clear, visual method of teaching the fundamentals of photography at a glance. I admit frankly that I learned more than I ever knew before about the scientific basis, as well as the practical importance, of good negative-making. In my opinion, the method of teaching evolved by Sergeant Hammer might well be adopted elsewhere, in and out of the U. S. Army. Let me hasten to say that my making special mention of this good work by Sergeant Hammer, in no way implies that the instructors in other departments of the school were one whit less original, helpful and efficient in their classroom-work. The fact is that new and original methods were

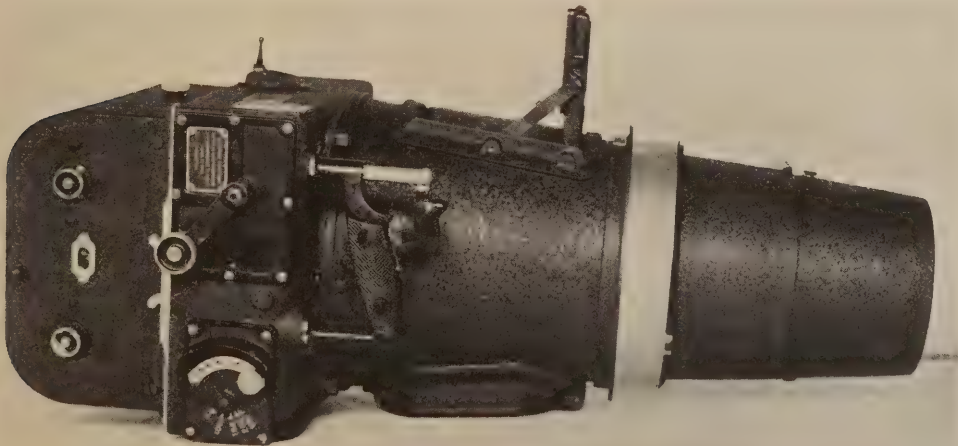


FAIRCHILD K-3 AERIAL CAMERA

AIR SERVICE TECHNICAL SCHOOL

being used in all departments and photography was made to mean more to me than it ever meant before for this very reason. In short, I seemed to be in touch with photographic history as it was being made day by day. The curriculum of the school is in a constant state of flux. A method or fact of today is superseded tomorrow by an overnight experiment or result of a test. This does not mean that the student is confused by the bewildering changes which occur. First of

all, he is thoroughly grounded in fundamentals and he is told nothing of the eleventh hour improvements until he is in a position to understand them and weigh their relative merits. In short, the U. S. Air Service Technical School Photographic Department, has its ear to the ground twenty-four hours a day and offers, in my estimation, an exceptional opportunity to any young man who is eager to make photography his profession, in or out of the service.



FAIRCHILD K-6 AERIAL CAMERA

AIR SERVICE TECHNICAL SCHOOL

Just as I was becoming comfortably settled in a daily routine of lectures, watching the students at work, having informal chats with the instructors and getting all the information possible, Lieutenant Charles Backes, Director of the school, suggested that we "take a hop" as a preliminary experience to going up to make some pictures. Now, let me confess that I had not given the idea of flying much thought. I reasoned that as an Officer in the Signal Corps I was not really eligible to fly, and that my coming to Chanute Field was merely to increase my knowledge of the latest photographic developments in methods and equipment. Whatever feeling of diffidence I had with regard to flying was thus lulled to repose by considering myself ineligible. To have this feeling of security suddenly blown to bits by Lieutenant Backes' suggestion was more than I expected. No sooner was the suggestion made than I recalled certain friendly words of caution given to me before I left home, by those who viewed with trepidation my going to an U. S. Army flying-field. These good friends recalled, for my benefit, all the airplane-accidents for several years past and added that, even barring a smash-up, the physical effects would be disastrous to my health and nerves. To make matters worse, the Lieutenant—to whom flying was merely a small item in the day's work—cheerily advised me to make out the necessary "obituary" papers, see the post-surgeon for a physical examination, draw a helmet, goggle and flying-suit and meet him as soon as possible at his hangar.

Well, before I had really made up my mind one way or the other, I found myself making out the necessary papers which would enable the authorities to send my remains home and dispose of my belongings. Next, I called to see the post-surgeon who tested out my lungs and heart. I shall never forget the quizzical look on his face when he remarked "So you've never been up before? It's a great experience!" Just what he meant by "great experience" was not clear to me. The remark could be taken to mean several things. I admit that as I left his office I felt in some degree the way a man must feel who is notified that he is to be shot within the hour. In this "happy" frame of mind I obtained my flying-equipment from the Quartermaster and walked, none too rapidly, toward the hangar where I could hear one of the big De Haviland Photographic Planes being warmed up. I remember distinctly taking a good look at the Headquarters Building and wondering whether or not I should ever see it again.

When I reached the hangar, I found Lieutenant Backes waiting for me. He very kindly helped

me adjust my helmet and goggles and then led the way to the plane which looked larger and roared louder as I approached its side. The Lieutenant assured me that on this first flight he would try no stunts; and that should I feel any ill-effects to tap him on the shoulder and he would land as quickly as possible. Whereupon I was shown how to climb into the observer's seat, which is directly behind that of the pilot, and adjust the life-belt. When I was all properly secured and had received a few kindly parting instructions from one of the Sergeants, the Lieutenant turned and asked if I was ready, I signalled "yes", the ship was wheeled about, facing the open field, the twelve-cylinder Liberty engine began to roar louder than ever, the plane gained speed, began to bump along the ground; and, before I realised it, we were several hundred feet in the air. Yes, I held on tight, and waited for something to happen to me or to the plane. But nothing seemed to happen. I never felt better in my life and the ship roared on and upward. At length, my grip on the supports of the seat relaxed, I ventured a look over the side. Still nothing happened. We were flying over corn-fields and along a state-highway on which I saw automobiles running along as though nothing unusual were taking place. I relaxed some more. Now and again the plane would jump a little; but this motion had no more effect on me than the motion of my motor-boat in a choppy sea. Before many minutes, I began to take an active interest in what was going on above and below me. We were nearing Champagne, Illinois, at an altitude of about 2,000 feet. Soon we were over the town, and I began to enjoy the experience of looking down on the roof-tops, the streets and the beautiful buildings of the University of Illinois. We circled the town; and as we banked to make the turn, I happened to glance over the side and had the thrill of apparently having nothing between me and the ground 2,000 feet below. However, by this time I was feeling more and more at home, and I experienced no disagreeable physical or mental effect. The roar of the engine and the wind-pressure, as we flew along at about one hundred miles an hour, made any conversation impossible. Once in a while, Lieutenant Backes looked around to see if I was still with him; and each time I waved him a reassuring signal and he continued contentedly on his way. The return trip was really enjoyable. I sat in my little cubby hole and just gave myself up to the happy conclusion that I was actually flying, feeling fine and that there was every prospect of my seeing the Headquarters Building again. As we approached Chanute Field, we circled



SHUTTER RELEASED TOO SOON—POOR PERSPECTIVE

A. H. BEARDSLEY



CORRECTLY PHOTOGRAPHED

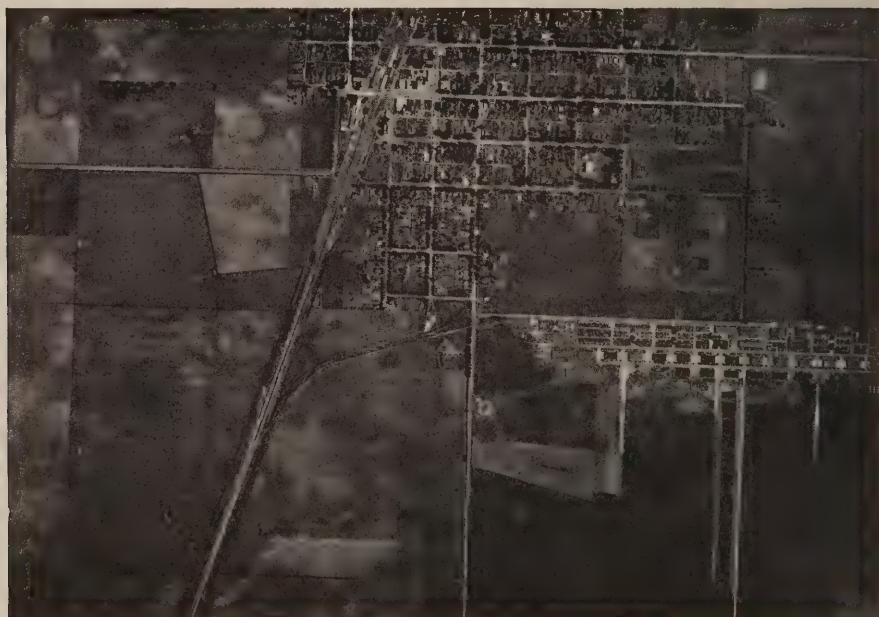
A. S. T. S. STUDENT

Permission of Air Service Technical School



CHAMPAGNE, ILLINOIS—OBLIQUE PHOTOGRAPH

A. H. BEARDSLEY



CHANUTE FIELD AND RANTOUL, ILLINOIS—VERTICAL PHOTOGRAPH A. S. T. S. STUDENT

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about until we were in the correct position to dip down toward the ground. Soon the grass was only a few feet below us and we were skimming along over it at about fifty miles an hour. Then the plane began to bump and I knew that terra firma was again reached in safety. We taxied across the field to the hangar and my first airplane flight had become history. When I again stood on the ground and chatted with Lieutenant Backes, I was able to report not the slightest ill-effect and a great desire to go up again at the first opportunity, and with a camera.

and I received instructions in its manipulation. At length, when I felt reasonably sure that I understood everything, the magazine was filled and we proceeded to the plane. Just before climbing aboard, Lieutenant Backes, who was again my pilot, explained a few details and we agreed on a system of signals which were something like this: after we reached the proper altitude and were over a house, railroad-station, bridge or other prominent object, Lieutenant Backes was to point out the subject, circle around it once to discover the best point of



VIEW-FINDER USED FOR AÉRIAL MAPPING

AIR SERVICE TECHNICAL SCHOOL

The next step was to get down to the real business of making pictures in the air. Although I felt a certain confidence about the matter of flying, I did not grow enthusiastic over the idea of standing up in the ship, leaning over the side and making exposures while the plane was inclined to move suddenly in unexpected directions. However, I was in for it; and I tried to imagine that the United States was at war; and that in that event I wouldn't hesitate a moment to do my duty, if thereby I could serve my country. At any rate, I faced the problem with a certain degree of fortitude. The first camera which I was given to use was a small 4 x 5 A-2-Graflex equipment, fitted with an F/4.5 Carl Zeiss Lens and Graflex plate-magazine. It was of metal construction, had two handles each side of it and suggested one of those Brownie fixed-focus daylight enlarging-boxes with the lens at one end and the plate or paper at the other. The thing was very clumsy to look at and to handle. Nevertheless, it had to be used,

view; and then, when he had brought the ship to the best possible position, he would make the plane quiver as a signal to me. Then I was to stand up, center the subject in the camera, make the exposure and signal to him when I had pressed the shutter-release. In the meantime, he would slow down the engine to reduce vibration and keep the ship as steady as possible until I signaled to him. Above all things, I was to avoid including either the wing or the tail in the picture. Moreover, I was to look out for bumpy air and sudden jumps of the plane which might throw me off my balance and thus ruin the picture. He said nothing about the possibility of my falling out. Finally, he added that the total time at my disposal, to make the exposure, was not to exceed eight seconds. To hover longer than that over the subject was extremely dangerous, especially at low altitudes over towns. When he had concluded, he asked me if everything was all clear. I nodded; but felt like adding that it was as clear as it ever

would be to a beginner who had never made a picture from an airplane in his life.

In a very few moments, we were ready, I was tied in with the life-belt and gripped the camera firmly as I sat down in the observer's seat. If I had not been thinking of making pictures, I would have enjoyed setting off on my second flight; but no sooner had we left the ground and were sailing comfortably over the farm-lands of Illinois than Lieutenant Backes pointed ahead. I looked, and some distance to the left was a stone farm-house which suggested a French Chateau. Now I was to make my first photograph from an airplane! Frankly, my heart was almost pounding its way right through my flying-suit. The ship banked sharply and we circled the farm-house. Then, the Lieutenant straightened it out, quivered the plane and I stood up, camera in hand—ready. But, a hundred-mile wind was tearing at the camera and at me. I hung on desperately to the camera, while I tried to stand up and find the farm-house somewhere in front of the lens, avoid the wings and the tail, keep from falling out myself and do it all in eight seconds. To add a thrill to this performance, my life-belt became unhooked and dropped to the floor, leaving me—as I thought at the time—virtually ready to have my name appear in the newspaper-headlines as having pitched headlong to my death from an Army plane. Yes, there I was, with both hands on the camera, apparently attached to nothing and every moment expecting to have the camera torn from my grasp. I could not lean down to pick up the life-belt nor could I let go of the camera. There was nothing else to do but try to make a picture and forget about the life-belt. I pressed the shutter-release, signaled to the Lieutenant and dropped down into my seat with a bump. For several moments I did not care whether I was there or elsewhere. Nothing seemed to matter much. The wind rushed by my head, the engine roared, the ship shook and bumped while I tried to get myself together. Then, suddenly I remembered that I had not changed the plate in the camera. Hastily, I tried to work the magazine. It stuck. I worked at it feverishly. The Lieutenant was pointing at something ahead. Nothing could persuade that magazine to work. The ship circled over another farm-building, the plane quivered as my signal, I stood up and foolishly yelled to the Lieutenant that the magazine had jammed. The words were torn out of my mouth and he never heard me at all. Then he shut down his engine and I leaned out as far as I could and just touched his shoulder. He turned hurriedly. No doubt he expected me to be sick

or out of my head. I held up the camera and pointed to the magazine. He understood instantly, and in a few moments we were safely down on the ground. I gave him the camera. He had no better luck with it than I did. We had to return to the hangar, go to the darkroom, take out a broken plate and hop off a second time. No camera-trouble developed, and neither did I find it so difficult to stand up and keep my feet while making the exposure. Much to my surprise and pleasure, I rather relished each signal to stand up and make a picture. As we flew along, I became more interested to improve my camera-work and virtually forgot about the motion of the plane, the wind, the roar of the engine and sudden bumps. I stood up, even when the Lieutenant was banking the ship, preparatory to getting into position. I never bothered again with the life-belt. However, I learned the trick of getting hold of something quickly and knowing just what I was going to grasp each time. I could almost anticipate just how the plane would bump or sway and I always had a good hold of some part of the ship, except when making the exposure.

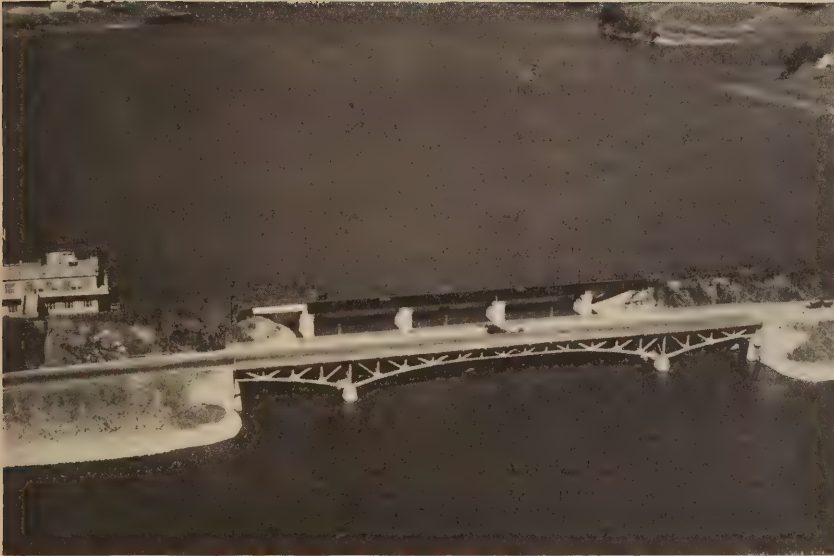
The result of that morning's photographic work was about four recognisable negatives out of twelve. The rest showed motion, were fogged or were exposed when I had apparently lost my balance and the camera was pointed at the sky. Altogether a rather discouraging piece of work. My respect for those who could make good aerial photographs increased one hundred per cent. Lieutenant Backes was very patient and kind about it and tried to comfort me with the statement that the camera I had used was an obsolete type which was now used merely to get the students accustomed to holding a camera and standing up in a plane. He assured me that the next time I would be given a modern Fairchild K-3 Camera and that I would surely get more satisfactory results.

Before my next flight I was instructed in the manipulation of the K-3 camera and I was given plenty of time to let the information "soak in". Moreover, I was shown how to fill the magazine with one of the special Eastman Hyper-Sensitised Aëro Panchromatic Films which, during the warm weather, are kept on ice before and after exposure, as they must be kept in a temperature below seventy degrees until developed. After I felt reasonably sure of this important part of aerial photography, I was given a twenty-five exposure roll and directed to go into the darkroom to fill the magazine. As the film was panchromatic, the work had to be done in total darkness. At length, it was done, and the magazine was brought out in the light to be



A COUNTRY-CLUB FROM THE AIR

A. S. T. S. STUDENT



TWO IMPORTANT BRIDGES

A. S. T. S. STUDENT

Permission of Air Service Technical School

taped. It seems that no magazine, so far devised, is absolutely light-tight in the air and the edges have to be taped securely with adhesive plaster. Even with this precaution, there is apt to be some fogging of the film. A final series of instructions, with the K-3 camera in my hands, completed my preparation for the next flight.

As I approached the De Haviland photographic ship for my third flight, I possessed a certain amount of confidence and an intense desire to bring back some pictures which might show improvement in technique. This time the camera was fitted into a special mount on the side of the observer's cockpit. The device was so constructed that the camera was virtually suspended in a cradle which in turn was held to the mount by several heavy elastic bands used to take up the vibration. Although it was still necessary to stand up and direct the camera at the subject, there was not the necessity to worry about the camera blowing away. Moreover, by its being secure in its mount, the camera afforded considerable support while standing up to wait for the ship to get into position. This third flight, over virtually the same ground as before, enabled me to attempt to correct previous mistakes and I was rewarded by getting some fairly passable negatives. Personally, I was delighted to find that I got anything at all. However, after going over the negatives with Lieutenant Backes, I could see where I still had much to learn in the matter of aerial technique. One outstanding fault was my tendency to press the release too soon after getting the signal to make the picture. This resulted in my not getting my principal subject well placed in the picture-area. That is, it would be too near the left side of the picture. My next difficulty was to get my horizon-line level. When I recalled the large number of marine views in which the water runs up or down hill, and think of how comparatively easy it is to avoid this on the ground, I wondered that I made any pictures at all from the air in which the horizon was correctly rendered. The short time allowed for the exposure, the rush of wind and the natural movement of the ship presents difficulties enough; but when the plane hits rough air, just as the camera-shutter is released, the aerial photographer is helpless. The usual exposure was 150th of a second, with the lens-stop at F/4.5. The K-3 Aerial Camera is fitted with a virtually fixed-focus 12-inch Carl Zeiss F/4.5 lens for use at altitudes from about 500 feet to as high as we have ever been able to go in aircraft. The highest point from which an aerial photograph has been made up to this writing is 32,220 feet. The temperature at that altitude was $62\frac{1}{2}^{\circ}$

below zero. If this camera is used at lower altitudes the picture will be out of focus and show motion. This model is used for oblique photographs—made from the side of the plane—and for vertical exposures in connection with photographs for mosaic map-making. In the latter case, the camera is mounted in a specially constructed and balanced frame with the lens pointing down through a hole in the floor of the plane. In addition, the camera-mechanism is operated by electricity which is supplied from a storage battery. There is a view-finder with a Carl Zeiss lens, also mounted in the floor of the plane, which enables the photographer to see the ground below and to correct the position of the camera in relation to the drift of the plane and the ground to be mapped. My time at Chanute Field was too limited to go into the matter of aerial map-making deeply enough to explain it accurately now. However, the little I saw of it, convinced me of its importance in military and aerial economic work.

By way of a few moments' diversion and with the idea of seeing what would happen, I took my $2\frac{1}{4} \times 3\frac{1}{4}$ Vest-Pocket Ansco camera on nearly every one of my flights. The results were by no means remarkable. I had to crouch down as far as possible behind the observer's windshield in order to get the little vest-pocket camera sufficiently sheltered to prevent its being torn from my hands by the wind. As it was, I was afraid that the bellows would be blown out of it before I could make an exposure. Obviously, I could not look in the finder. I just held the little camera as securely as possible, pointed it toward my subject and trusted to luck to get something. The exposure was 100th of a second at F/7.5. For the benefit of those who have an idea that any camera will do for aerial photography, let me say that the results which may be obtained with an ordinary ground camera in an airplane will be due entirely to exceptional conditions and gambler's luck.

The matter of finding suitable lenses for aerial photography has been a difficult problem to solve. I looked into the matter very thoroughly and I state here just what was told me by those who know. I was carefully shown the stringent requirements for lenses to be used in aerial photography. I was told that lenses of nearly every standard make on the market had been tested very carefully. Moreover, cameras of various makes and styles had been used and tested. The object was to find the best possible combination of camera and lens for use in the air. I was told that after months of laboratory experimenting on the ground and testing in the air, under all conditions of altitude and weather,



THE FARM-LANDS OF ILLINOIS THROUGH THE CLOUDS

A. H. BEARDSLEY



BUILDINGS OF THE UNIVERSITY OF ILLINOIS

A. H. BEARDSLEY

Permission of Air Service Technical School

Carl Zeiss, Jena, lenses were found to be the only photographic lenses, so far developed, that met the special requirements of the U. S. Air Service. Virtually all the finest airplane-photographs to be seen in the magazines and newspapers of the United States are made with Carl Zeiss, Jena, lenses; and the famous U. S. Air Service photographer, Captain A. W. Stevens uses Carl Zeiss, Jena, lenses exclusively. His wonderful pictures need no introduction. The U. S. Air Service was absolutely impartial in making tests, and is now. All that it desires is to find the equipment which will do the best work in the air regardless of make or price. These facts, it was clearly explained, were given to me without in the slightest degree reflecting on the excellence of other standard photographic lenses, many of which are used for ground-work in the Air Service. These are merely facts which exhaustive tests by expert Army Officers have proved to be true under actual flying-conditions.

The operation of the K-3 camera, after it is ready for action, is no more complicated than an ordinary box-camera. In fact, this is a necessity. In the air there is no opportunity to make fine adjustments of shutter-speeds and diaphragm-stops. It is about all a man can do to hold the camera properly and release the shutter at the right moment. The K-3 has a between-the-lens shutter of exceptionally large aperture. It is a very delicate mechanism and is rather easily put out of commission. Incidentally, one morning we flew over Danville, Illinois, and made a considerable number of exposures only to find upon development that the shutter failed to operate after the second exposure. There was no way—at least none known to me at the time—to discover this trouble while in the air. On another morning we were flying at 10,000 feet altitude to permit me to make vertical photographs as for mapping. This time the camera was operated by electricity. That is, upon pressing the shutter-release, the motor re-set the shutter and turned a new section of film into place. Not until our return to the ground did we discover that the film had not been wound at all after the first exposure. I mention these incidents to show that there are many factors to contend with besides the making of the exposure and getting the subject properly centered in the picture-area.

Just as I was leaving Chanute Field a new model Fairchild Aërial Camera, known as the K-6, arrived and I was eager to try it. This camera was even larger and heavier than the K-3 but it had a number of important refinements which ought to prove of great service. However, from my limited experience I do not

believe that a spirit-level or a direct-view finder is of any practical assistance in making oblique aërial photographs. There is not sufficient time to get the subject nicely centered in the finder or the camera perfectly level. Only those who have been up with one of these cameras know what a tremendous strain aërial photography really is, due to the high rate of speed, wind-pressure, vibration, air-eddies, altitude-variations, atmospheric conditions and extremely limited time in which to make an exposure.

It may not be amiss to state briefly how flying affected me physically. Let me say at once that I suffered no ill-effects. At 10,000 feet I was aware of pressure on the ears; but swallowing relieved this. At this altitude I was cold and my teeth chattered, although it was a warm mid-summer day on the ground. To be sure, we did not have on heavy flying-suits, because the pilot did not think we would need them. That we were cold, was our own fault. Nevertheless, I was convinced that the air was decidedly cooler at 10,000 feet than at lower altitudes. A sudden drop of the ship sometimes made me gasp, but not uncomfortably. The sensation is similar to that sometimes experienced when by mistake one turns on the cold instead of the hot water in a shower-bath. I experienced the thrill of a tail-spin without any effect other than to lose my sense of direction temporarily. In short, when we began it, the ground was below me. During the descent, it alternated between being above and then below me. Just how it all came about I am unable to explain and my pilot could throw no light on the subject; I was not aware of changing my position in the seat. All that the pilot said was that the observers always got the worst end of a tail-spin and that it sometimes made them very sick. I believed him, even though it did not make me sick. Let me admit that after an hour or so in the air, making pictures, one is well contented to rest. After my preliminary flights I ached in every part of my body from the experience. It demands physical effort of an entirely new kind and it requires time to become hardened to it.

One thing more may be of interest. That is the matter of parachute jumping. No, I did not jump; but I did talk with those who had and who thought nothing of it. Briefly—according to the men who had jumped a number of times—there is no sickening sensation after leaving the plane. Rather there is a feeling of being carried along with the plane. This can be understood when one realizes that for some time after leaving the ship the body is traveling at a high speed in the same direction as the plane. Before this

horizontal motion gives place to falling, the parachute is open, provided the jumper has pulled the rip-cord as soon as he has cleared the ship. The usual interval is measured by counting three, after jumping. The landing is made at a rate equivalent to that obtained by jumping off a twelve-foot elevation. Obviously, to land in a field is one thing and on a roof-top is another. Nevertheless, the modern U. S. Army parachute is a marvel of efficiency and already it has saved the lives of a number of officers and men. All pilots and photographers are required to wear parachutes, especially when flying at high altitudes. It is not always required at low altitudes, for usually the plane is too low to permit the parachute to open before the jumper hits the ground. Hence, it is of little use to wear a parachute for ordinary aerial photography. The parachute at the higher altitudes is to the aviator what the life-preserver is to the sailor.

In conclusion, let me say that I have not

attempted to go into technical details in this first article because I do not consider myself qualified, as yet, to write with sufficient knowledge of my subject. However, I am anticipating further opportunities to improve my technical knowledge of aerial photography and the special developing and printing processes and will then try to tell my readers more about it. Nevertheless, I have been won over to the practical value of aerial photography, not only in a military and engineering sense but because I see in it future possibilities for the pictorial photographer. If my readers could have witnessed with me the glorious cloud-effects and have had the experience of flying through and above these cloud-formations, I am very sure that they would share with me my enthusiasm. Lastly, let me say that in my opinion there is not so much danger in aerial photography, with a reliable pilot, as there is in motoring along our crowded highways on a holiday afternoon.

Photographic Portraiture

DR. T. W. KILMER

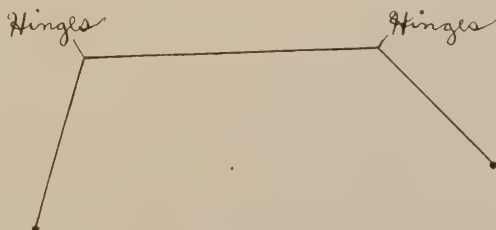


OR the past thirty years my greatest hobby has been that of photography; and especially the photographic portraiture of men. It is at the request of the Editor and many of my friends that I shall try to put on paper, in their regular sequence, the exact steps I go through in making a portrait. First as to

Camera Equipment.—I use either a Century 11 x 14 Studio camera and stand equipped with a special 24-inch Wollensak Verito, used at F/5.6 or F/4.5, or a 5 x 7 View camera, using but half the film ($3\frac{1}{2} \times 5$) at a time, thus making two exposures on the one 5 x 7 film. This camera has a 10-inch Carl Zeiss 1 c Tessar lens always used at F/4.5. I use Eastman Super-Speed Portrait film. When I use the 11 x 14 camera all my prints are contact prints usually on Vitava buff paper. When I employ the 5 x 7 camera, I depend upon projection for my 8 x 10 or 11 x 14 prints, made on Vitava Rapid buff paper. I use a Folmer & Schwing wall-projecting camera, having a Cooper-Hewitt M-tube for illumination, and projected through a 10-inch Wollensak Verito lens, at about F/8. A lens-hood to me is a very important factor as I can get better pictures with its use and when making the original portrait. The best portraits I have ever made have been with the 11 x 14 camera, large Verito and contact prints. So much then, for

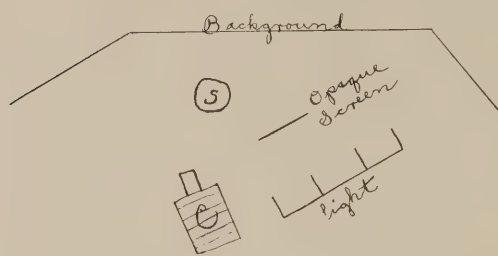
the camera-equipment. Now as to the so-called studio-equipment,

Light, backgrounds, screens.—My light consists of four, 50-inch Cooper-Hewitt tubes hung at an angle of 45°, the lower ends of tubes being about five feet from the floor. These tubes have home-made tin-reflectors painted white. The tubes are about one foot apart and are fastened permanently on the wall of my office. I made a three-segment screen used as a background. The screen is about seven feet high. One side is



covered with plain, dark-green cloth; the other side is covered with a light-gray cloth (cotton rep). I use this screen when not in photographic use, to hide Cooper-Hewitt lights, camera and all other photographic equipment, so that my office presents a very satisfactory professional aspect as that of a practising physician. I made

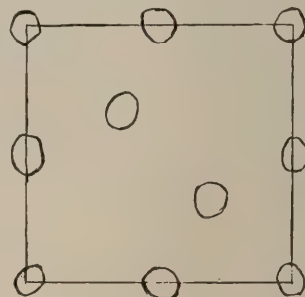
a posing-bench which consisted of one heavy plank $2\frac{1}{2} \times 10 \times 40$ inches used as a seat, with four 30-inch heavy legs—one at each corner. This I painted black. A small two-step stool is used, upon which the sitter rests his feet while seated on the posing-bench. I often use an opaque screen, $2\frac{1}{2}$ feet wide, which can be raised and lowered, as occasion requires. This screen is simply a long piece of heavy mount-paper, and is interposed between light and sitter to cut down the light on certain parts of the face. A too prominent ear is thus put in shadow. On rare—and they are *very* rare—occasions, I sometimes use a spot-light; but I am using it less and less. I believe that one should get far away from grotesque and bizarre lighting, and use a light that comes from an *area* and *not* from a *point*. Most all of my portraits are made with my improvised “studio” arranged as follows:



Frequently I will pin a square piece—10 x 10 inches—of light-colored paper on the wing of screen on shadow side of sitter; this gives a little reflection and oftentimes brightens up the face on that side. I am a firm believer that in making portraits of men we should show a large-sized head, and, therefore, make most of my portraits according to this rule. Any lens that you use should be of a focus that is the sum of both the short and long side of the plate. If you use an 8 x 10 plate, the lens must be of 18-inches focus or you will get distortion. A silent shutter makes the best one. It should be behind the lens.

Lighting the Face.—Volumes have been written, and still more will be written, as to how to light a face in photographic portraiture. It seems such a simple thing that I wonder why so much is written about it! One great point that strikes me as the most important is to have the light strike the sitter from the front, and not too much from his side. Get the light around in *front* of him. Harshness will be the result, if you do not. Be sure that your source of illumination comes from an area and not from a point. You will get a much better portrait of a man if the light comes from several electric bulbs, set at ten inches from each other, than you will from but *one* bulb, even

though it be of the same wattage as the combined, several scattered bulbs. A light emitted from ten 50-watt bulbs spread over an area of a square, 3 x 3 feet, will give you a much better portrait-lighting than will *one* bulb of 500-watts. So



then, the light should best come from an area, and not a point. The center of my Cooper-Hewitt lights is about two and a half feet higher than the head of the sitter, and is quite well out in front of him. My lights are not diffused by any medium. They are more or less diffused in their natural state, so why try to diffuse them more? This only increases exposure. Do not have your sitter too far away from the light. This makes muddy looking faces. Some skins photograph more quickly than do others. A red-faced, weather-beaten skin will require twice the exposure than will a white anæmic skin. Some skins are naturally greasy and will shine in the light and require less exposure than a thick, dry skin. The average exposure that I give when using the 11 x 14 camera and 24-inch Verito is about two to three seconds. When using the 5 x 7 camera and 10-inch Zeiss, it ranges about one-half to one second. In a correct lighting, the shadow of the nose should fall slightly downward and to one side. Fat men should be lighted from the front, with light fairly high, thus hiding the undesirable double chin and lengthening the features. Thin men should be broadened out by having the light more to the side and not quite so high. I believe great harm can come to a likeness by too much posing. Just tell the man to hop up on your posing-bench, and put his feet on the stool. He will invariably want to know what he shall look at, and how he shall sit. Just tell him that you do not want him to do anything for you, and that you do not care one bit what he looks at. It is said that women are vain! They do not begin to be as vain as do most men. I truly believe that men are the vainest creatures living. Get the fellow talking upon his pet hobby; get his mind off photography. The better you are acquainted with your sitter,



GROUP OF PORTRAITS

DR. T. W. KILMER

the better a picture you will get of him. Personally, I like pictures of people looking at me, and I make many looking right into the lens. I find that a man who shaves himself usually likes a portrait that looks at you, because that is the way he sees himself every morning in the glass. Many men actually do not know how they look, and their wives or daughters must pick out the print that they think looks like him. Grouchy men photograph best after eating. Never make a picture of a man at night, as he is likely to have a tired look, especially if he has had a hard day's work.

Development of Films.—I always use a tank for my 8 x 10 films, employing the formula recom-

mended by the maker of films, usually a pyro and loda developer. Be sure to develop the film long enough, as underexposure is deadly. My 11 x 14 films and 5 x 7 films are developed using M. Q. tubes, or Rodinal 1 to 30. Most of my exhibition-prints are 11 x 14 multiple-gums, made either direct from the 11 x 14 original films or from projected paper-negatives 11 x 14 in size, made from the half of a 5 x 7 original film and first making a contact positive. I have tried to give an accurate working-account of the methods I have used for the past few years, and sincerely hope that anyone following them will have the pleasure and enjoyment that they have afforded the writer in his photographic work.



COLLIE

W. F. PROVO

CLEVELAND PHOTOGRAPHIC SOCIETY

Building a Live-Wire Photographic Club

H. G. CLEVELAND



WAY back in 1913 a small handful of ardent photographic enthusiasts decided that an organisation was necessary to obtain the most pleasure and benefit from their particular hobby, and they immediately proceeded to form The Cleveland Photographic Society. As time went on, their photographic interests began to wane, and their love for cards, chess, and checkers became strong, and during these days through lack of interest the organisation gradually grew weaker and weaker until it had almost foundered upon the rocks. It was in this hour of dire need that a few of the more enthusiastic members of the fast declining club decided that something must be done, and they proceeded to form a new organisation and incorporated in 1920 for the purpose of conducting and maintaining a Society, the object of which should be the bringing together of those interested in the various branches of photography; the creation and furtherance of cordial

relations and the promotion of common interest in photographic science and art.

At that time there were less than twenty members in the organisation; the funds were depleted; and to make matters worse, the necessity of moving was thrust upon them; but nothing daunted, this staunch little group set their teeth and determined to find new quarters. They found three small rooms at a slight increase in price and proceeded to rebuild their darkrooms. At the end of about three months' time, and just as the darkrooms were completed—the members doing all the work themselves at odd times—they were given notice that their rent had been doubled, and as they were at their wits' end to pay the rent as it was, they were again forced to move. Every member of the club was appointed a committee of one to look for new quarters; but none was to be found within their means. However, where enthusiasm and determination reigns, a successful outcome will ultimately be found. At the last moment, a



"LOOK, MAMMY!"

GEORGE COOK

CLEVELAND PHOTOGRAPHIC SOCIETY

large room was rented in the very slums of the city in which to store the belongings of the society until a better location could be found, and in this room amid all the photographic junk piled helter-skelter, meetings were held weekly to keep the members together, and at the end of a month another location was obtained which promised to be an improvement; but with the necessity of moving three times within such a short space of time, the finances were completely depleted, and the organisation was only able to keep its head above water through the willingness of a small body of its members to stand for an extra assessment of \$1.00 a month, which was necessary over a period of about six months.

After all these trials and tribulations, the fortunes of the society began to change, due to the constant and untiring work of the trustees, who realised that a photographic society, to be a success, must be founded on business-principles,

and who assumed their responsibility and held regular weekly meetings to discuss the various matters pertaining to the club. The members have at all times expressed the desire to be relieved from consideration of business-matters in connection with the organisation, and all business-matters are brought to their attention only once a year at the annual meeting, unless something of extreme importance should require their consideration and judgment.

The trustees realised that to obtain members, and keep them, it would be necessary to give them something for their money in the way of photographic education, entertainment, social features, etc., and to continue doing so. Regular meetings are held every Wednesday night, and to provide some form of entertainment at every meeting was a problem to be met, which has been successfully done. Every third Wednesday in the month a print-competition is held, and the



THE TEMPLE-ARCH

HARRY FRIEDBERG

CLEVELAND PHOTOGRAPHIC SOCIETY

hanging of these pictures, the criticism of same, and the friendly rivalry connected therewith, has done much to keep the members interested in photography and to improve their work, with the result that today it is not unusual to have fifty or sixty prints in a competition, and the quality of the material submitted is continually improving and is superior to that of their annual exhibits of years ago. On other meeting-nights various forms of entertainment are provided such as demonstrations of the various processes by the members, talks and lectures on points of photographic interest, often accompanied by lantern-slides and, whenever possible, outside talent is obtained without expense. Special features are introduced during the year to add variety, such as an annual banquet, annual outing, auction of photographic equipment—which has always proved of unusual enjoyment to all present and on which the club collects 10%—Christmas party or April Fool party at

which friendly jokes are played on the various members. Photographic hikes are scheduled frequently on Sundays. During the winter a photographic school is run to teach the elementary principles, and which any one may attend without any charge whatsoever, and a portrait class is run weekly for the benefit of the members. In the summer-time when the heat is oppressive, hikes for night-pictures on meeting nights have proved a happy diversion.

Another fundamental which was recognised was the necessity of publicity, at little or no expense. To cover this ground, the members are frequently urged to talk up the club to their friends. Whenever something of unusual interest is occurring at the club, the newspapers are furnished with the information and the public invited. Occasionally a page of pictures is run in the rotogravure section of the Sunday papers, with due credit given to the society. An annual exhibit of pictures is hung at the best place



PASTORAL

H. G. CLEVELAND



THE TOILERS

B. E. CLARKSON

CLEVELAND PHOTOGRAPHIC SOCIETY

obtainable, and the public invited to view same. A mailing-list is kept of all live prospects, and a monthly bulletin is published and sent to all members and prospects. In fact, every possible method of acquainting the public with The Cleveland Photographic Society is tried.

The question of dues is another problem. These have been kept as low as possible consistent with expenses, amounting to \$2.00 per month, and careful consideration is given to all expenditures, as to the necessity for same. The collection of dues has been another problem, as with most clubs; but through the frequent urging of the necessity for prompt payment, our organisation has been quite successful in this regard.

By determination and careful attention to details, the organisation gradually grew; the membership grew to thirty, and finally in 1923 the opportunity arose to obtain the third floor of a downtown building under lease for a number of years. The trustees assumed the responsibility and we moved to our present location, on which the lease has still four years to run.

The quarters were in a terrible condition with an accumulation of dust and dirt and rubbish of many years' standing, the sight of which would have caused many another organisation to give up in despair; but all the members were organised to work and assigned duties to perform, and they scrubbed and cleaned and washed walls, and painted, installed fixtures, erected darkrooms, and did a thousand and one other things, until the same was finally put in presentable shape. Just an instance to cite some of the difficulties encountered. On moving into the quarters, the landlord had agreed to furnish the heat. Steam-lines were available; but the radiators were in the basement. Constant pleading with the landlord to supply the radiators, one of which must have weighed a ton, was without avail. He was willing to have them moved to their proper location but could find no one who would do it. Finally on Hallowe'en night, which was a meeting-night, the members took the matter in their own hands, and by sheer numbers carried the radiators up three flights of stairs so they could be installed. This brought forth the following epic by the editor of our bulletin in a subsequent issue:

Th' night was cold an' dreary
An' th' quarters of th' club
Were gosh-darned damp an' clammy
Like th' inside of a tub
That women use for washin';
So we says, "This here's absurd!
"We've got to have some heat here
"In our clubrooms on th' third!"

"In the dark an' musty basement,
"Fifty feet below us here,
"Are some rusty radiators
"That will bring us lots of cheer
"If they're hoisted up th' stairway
"(They are *ours* so we've heard)
"From their home down in th' cellar
"To our clubrooms on th' third."

Then up an' spoke Sir Steinke;
"Let's do it, boys, ourselves!
"We'll have 'em up in no time
"If we work like bloomin' elves!"—
So we yelled, "All hands on deck, boys!"—
You will soon know what occurred
When the radiators started
On their journey to th' third.

We were "twenty-one" that night, boys;
"Strongs" an' "weakss" an' "shorts" an' "talls";
Every one of us had pants on—
Not a one had overalls!
Poor old Cleveland groaned an' grunted—
But his heart with joy was stirred
As we slid ten tons of "radi"
'Cross th' basement toward th' third.

To the first floor from th' cellar—
Thru th' hash-house to th' street—
'Long th' sidewalk to our doorway—
Ev'ry thing was goin' neat!
One! Two! Three! And *up* she goes, boys!
Then an awful crash was heard—
We had split th' bloomin' stairway
On our journey to th' third.

Then a husky guy named Temple
Shoved his carcass underneath,
An' he spit an' blowed an' sputtered
An' he gritted of his teeth;
An' th' darn junk started movin'!!!
Fast an' faster, like a bird
That's a-startin' for th' Southland,
Towards our goal—th' frigid third.

Finally we reached th' top step
An' we gave a mighty roar—
Tange yellin', "Viva Snozo!"
(Orry's pants were on th' floor!)

Many tales have since been whispered—
Many a joke—but nary a word
How one night we hefted "radi"
From th' basement to th' third.

R. D. Hartman.

The headquarters of The Cleveland Photographic Society now consist of a large meeting room capable of holding one hundred persons, with beaver-board panels on all walls for exhibition of prints, a lounge room with easy chairs and files of photographic magazines, portrait-room



MORNING-GLORY

CLEVELAND PHOTOGRAPHIC SOCIETY

RALPH D. HARTMAN



COALYARD

CHARLES LEDERLE

CLEVELAND PHOTOGRAPHIC SOCIETY

equipped with large flash box, a flood-light of five 300-watt bulbs, a 1,000-watt portrait-lamp, 8 x 10 camera and stand, diffusing-screens, back-grounds, etc., 3 darkrooms equipped with running water, 2 enlarging-lanterns, 3 printing-machines, retouching-desk, 20-inch print trimmer, etc., a locker-room which contains lockers for thirty-five members—for which a charge of \$3.00 a year is made—and a general workroom covering in all about 2,100 square feet of floor-space. The membership list has grown to over sixty.

The Cleveland Photographic Society is a member of the Associated Camera Clubs of America, and feels that it is not only a duty for successful clubs to join this organisation and be of whatever assistance they can to their less fortunate brethren, but that much benefit is directly derived therefrom through the perusal of the various prints and slides received in the traveling-exhibit. In passing, it might be well to mention that the plan adopted by The Cleveland Photographic Society for the selection of prints for the traveling-exhibit is slightly different than that adopted by most of the clubs. In selecting the prints required, an effort is made to represent as many members of the club as possible, rather than select the best prints only. As a result there are only two or three prints at

most by any one member in the traveling-exhibit, as compared to the much larger number of prints by one individual submitted by some of the other clubs. This, of course, results in the standard of the exhibit being lowered to some extent; but gives the members of the association a good idea of what our organisation is doing as a whole and not what a few individuals are doing. Individual members have had prints hung at photographic salons at London, Pittsburgh, Los Angeles, San Francisco, New York, Buffalo, and many other places, and have won prizes and gold medals for their efforts.

In conclusion, just a word of advice to other less fortunate photographic organisations. Cultivate the determination to succeed; do not be disheartened by adverse circumstances, but plug along; keep a stiff upperlip; follow business-principles; give the members something for their money; avail yourself of all possible methods of publicity; make pictures; make every effort to improve results; and work together, and success is assured.

[Now is just the time for other camera clubs to follow the example already set by the Seattle Camera Club and The Cleveland Photographic Society. Such articles are interesting, helpful, and tend to keep up the club-spirit. Let us have more of them. EDITOR.]

Practical Kinematography

HERBERT C. McKAY

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Chapter IX—Speed-Variation (continued)



AS with slow-motion, the stop-motion film undoubtedly has more value as an aid to scientific research than in dramatic work, or films for pure amusement. There are many movements which take place so slowly that the eye can detect no change, even for protracted periods. Thus in the growth of plants, certain physical changes and so forth, the stop-motion will demonstrate clearly the exact character of the motions involved, and show them at a rate of speed which gives an impression of definite speed.

As an example, let us take the growth of a potato, one of the "six weeks" variety. We can use six weeks as an approximation of the time which will be required to show this plant from the time of planting until mature. Our next step is to determine the length of the desired film. If we made a full reel, running for fifteen minutes, it would be very tiresome, and would only be appreciated by scientists. If we produce our film in thirty seconds it will be so rapid that we can see only a blurred rush as the plant springs up. After carefully considering the action, suppose that we decide that five minutes is a good length for an ordinary audience or a class in a secondary school.

Now we have six weeks which is to be condensed into five minutes. And by the way, in that sentence lies the explanation of the Time Condensation Camera, a high sounding name given to any camera which is used in stop-motion work such as this. Many people believe that it is some kind of a magic camera which photographs these films in the time taken for projection. In this, as in other professions, our countrymen exalt the machine but fail to realise that the machine would be but a mass of wood and metal if it were not for the man behind it, in this case the kinematographer.

But to return to our time-condensation. Our five minute film will have 4800 frames (5 x 60 x 16) and these 4800 frames must be distributed throughout six weeks. For convenience we will reduce the six weeks to hours, which gives us 1028. As this will give us a large fraction we will further reduce it to minutes, giving us 61,680 minutes. Now dividing this by 4800 we get 12.85 minutes as our inter-exposure interval. We can disregard the fraction

and make it 13 minutes which will give us forty-three days and eight hours working-time; or, if you are superstitious, just make it twelve minutes which will cut two days off your first schedule making it just forty days.

Now as you have twelve minutes in which to make each exposure, the next step is to arrange for suitable lighting and exposure. A 50-watt blue nitrogen filled electric bulb set in a reflector on each side of the plant will be ample. An exposure of from two to five seconds will be required according to varying conditions. I should advise an opening no larger than F/6.3 or even F/8.

The plant must be planted in a box or pot indoors. This is desirable for several reasons. First, there will be no winds blowing to change the plant between exposures in any manner other than such as is produced by growth. Likewise there will be no breezes to move the plant during the actual exposure.

Unfortunately for us, in this case, plants grow throughout the twenty-four hours, so you will have to arrange with a partner to take shifts with you. It is obvious that any difference in lighting would make an undesirable film, so that the indoor location is even further desirable. The room should be arranged to be darkened to a considerable degree just before each exposure so that there will not be more than a 10% variation between any of the exposures made throughout the twenty-four hours.

Now as to this twenty-four hour work. This is the great difference between stop-motion work of the cartoon type and true time condensation. The dolls and cartoons can be stopped at any time and resumed at your pleasure; but once begun, the time condensation must be continued or dropped. And once dropped there is no course open but to begin again.

If a great deal of work is to be done an electrical device can be purchased or constructed to turn on the lights, make the exposure and turn off the lights; but such apparatus is expensive and you will not wish to make such an investment until you are sure that you have the patience to go into this kind of work in earnest. Very few people have such patience. My own plan is just as efficient, and I think preferable because there is no chance of the electricity failing you at a critical moment.

I try to get my equipment all in place and in operating order the day before I wish to begin. When the time comes, I take my darkroom timer and set it for the required interval. I then make the exposure of the first frame and sit down to read or otherwise occupy my time. When the alarm sounds I do not jump up and rush. I know I won't keep up the pace, so I get out of my chair leisurely, reset the clock, turn on the lights, make my exposure, turn the lights off and sit down again. I do this because I know that in the wee sma' hours I shall be sleepy and will move with about the same tempo, so by beginning in this manner I am pretty sure to be able to use the same period for each movement time after time. It is a good plan to have your chair close to the camera and the clock within reach, then you can perform all necessary operations without getting up. Just make sure you don't go to sleep and sleep past a half dozen or so intervals. Remember that the usual darkroom clock only sounds once.

Now I will let you in on a secret, not that I want to encourage haphazard methods; but perhaps to save a perfectly good time-condensation film when half done. If you should sleep through three or four or perchance eight periods, go right ahead! You have lost no more than a careless projector operator would slash out to repair a break. Ninety-nine per cent. of your audiences will not notice the very slight resulting jump. While I have never done it myself, I have talked with kinematographers who when working on film of fifteen minute or greater

intervals, habitually make only hourly exposures at night, snatching cat-naps in between.

Such is the principle of time-condensation. No matter what the subject, the same method is used. The inter-exposure interval is calculated in the same manner. The duration of the exposure is based upon the time allowed and the movement of the object. It is better to give five seconds than a fiftieth of a second, for the percentage of error is far smaller in a long exposure than in a short one. You can turn a crank during five seconds and be within ten per cent. of right, while trying to give a manual exposure of one fiftieth you may give one hundredth or one tenth.

Available subjects are without number. I once saw a film which showed a skyscraper rising from the ground. It was excellent considering the difficulties. In such work as this, the exposure for each individual frame has to be calculated, for the light varies from hour to hour and only the scientific use of an accurate actinometer could make a passable film.

In this case long exposures were made so that the workmen moving would obliterate themselves, which effect was helped by their being very minute. All in all, the film was very good, indeed, although not of a quality which could have been admired had the subject been one more amenable to control. I shall mention this work again in the section of this work dealing with educational films.

(To be continued)

What's in Photography?



HERE are times, in our private and public undertakings, when we come face to face with facts. We may try to avoid them, overlook them or ignore them; but, like our own conscience, there is no getting away from them. Often I wonder how many of us stop long enough to grasp the fact that today photography is becoming so much a part of our social, artistic and industrial life that, like the telephone, we accept it all as a matter of course and just a part of our daily life.

I believe that everyone of us who loves the science and art of photography ought to sit down quietly, once in a while, and realise what's in photography for man, woman and child. So many times we stress the artistic or industrial part of photography and fail to take

into consideration how important it may be made in matters of health, recreation and travel. Then, too, the author finds that photography is a great asset in his literary work; the physician in his medical practice; the lawyer in settling cases, and the teacher in education. But, perhaps, best of all is photography in the home. Yes, the pictures may be crude and may never be seen at exhibitions or salons; but oh, the heart-interest, the love, the memories which become part of them, as the years go by! As we think of these things, quietly and reflectively, is it not true that there is a tremendous power for good in photography? By striving for high ideals and standards, cannot this wonderful art and science be made a blessing, an inspiration and a great comfort?

A. H. B.

How I Made a Telephoto-Lens

WILLIAM S. DAVIS



HAVING a weakness for experimenting and the production of home-made apparatus, the idea came to mind some little time ago that it might be possible to make a complete telephoto-lens of serviceable character by a proper selection of elements from the accumulation of optical "odds-and-ends" on hand. Since to try involved no cash-outlay for extra parts, there would, on one hand, be nothing to lose and on the other hand possibly something to gain by giving the idea a trial. So, upon rummaging about a bit, I found the elements of a "Gem tube" given me many years ago. The lens thus designated is in construction a small portrait-lens of the standard Petzval type, one combination being a cemented achromatic meniscus, similar to the "single achromatic" lenses used on moderate-priced hand-cameras, and the other combination comprising two single glasses mounted in one cell with a slight air-space between. One of these elements is a double-convex "positive" and the other a concavo-convex "negative" or dispersive lens. The two combinations were mounted in a plain brass-tube about $2\frac{1}{4}$ inches long with a fixed central stop or diaphragm between. Many years ago "Gem tubes" were much employed in making ferrotypes—the so-called "tintype" pictures—being used in batteries of from two to nine to obtain a corresponding number of duplicate ferrotypes at each exposure. The lenses were made in focal lengths adapted to the sizes known as one-ninth and quarter-plate, that for the first named being of 3-inch and the other of $4\frac{3}{4}$ -inch back focus. My lens was the smaller size. Whether these lenses are yet made or not I don't know, but occasionally they are listed by dealers in second-hand apparatus and can be had for a very small sum.

Before telling how I utilised my old lens a brief outline of the main principles involved in telephoto-construction may serve to make certain points better understood.

First of all, let me say that the true telephoto-types are not to be classed with the so-called "telephoto supplementary" lenses made to slip over the front of an ordinary lens like a ray-filter, and sold for fifty cents or thereabouts. These lengthen the normal focus of the camera-lens about twenty-five per cent. but the increase in the size of the image is simply proportionate to the increase in length of focus. The true telephoto, or telescopic lens, on the other hand, gives an image much larger in size than that

which can be produced from the same standpoint with an ordinary lens that requires the same bellows-extension, owing to the fact that the *equivalent* focus—which is the factor that determines the size of the image—in the case of a telephoto is very much greater than the *back* focus or distance from rear lens to focusing screen. In fact, the equivalent focus is so much longer than the back focus that it is measured from a computed imaginary plane situated in air some distance in front of the camera. As many know, there are on the market several forms of the telephoto-lens which is complete in itself or has attachments so mounted that a suitable camera-lens can be added to form the positive element.

However the different lenses may differ in detail, all the telephotos in general use work upon the same principle; the complete system comprising a positive or collective lens—which may be a corrected single or doublet lens—at the front to gather the image-rays and a negative lens in the rear to extend the length of the light-rays and magnify the image. The shorter the focal length of the negative element, proportionate to that of the positive, the greater the amount of magnification at a given bellows-extension, and, conversely, the smaller the field of view, the slower the working-speed of the combination.

For average purposes the best combination seems to be a negative lens that possesses a focus of from one-half to two-thirds that of the positive lens. Such a combination will give magnifications of three to five diameters without requiring an excessively long bellows-draw, assuming that the positive lens employed is of approximately six-inch focus when a 4 x 5 plate is to be covered.

My first move was to find out how near the lenses which were available came to fulfilling the conditions named above. Measurement showed that the cemented single-achromatic combination of the "Gem" possessed a focal length of approximately $6\frac{3}{8}$ inches, and having at one period used it as a regular camera-lens with excellent results I felt that this would probably answer for the positive element. As before noted, one of the elements of the other combination was a concavo-convex negative lens, but its focal length was not known. Since a lens of this kind is incapable of forming an image in the manner of a positive, a different method than usual had to be used to determine its focus. I employed the following method, described many

years ago in one of the photographic journals. It has the merit of simplicity. Prick two holes in a piece of thin card one-half inch apart—or any distance less than the diameter of the lens to be tested. Place this card in contact with the lens, taking care that the latter covers the holes. Put a sheet of paper in such a position that its surface faces the sun; interpose between this and the light-source the lens and move the latter back and forth until the spots of light emanating from the holes in the card are exactly twice the distance apart upon the paper as the holes in the card. Then, the distance from lens

sliding-tube *T*. The negative-element, *N*, is mounted in one of the original threaded brass-cells, with the convex side of the lens facing toward the focusing-screen. The achromatic positive lens, *P*, is fastened in a cardboard tube, *T*, which slides within the brass-tube, the convex side of this lens facing outward. The tube *T* was made by rolling up a strip of flexible cardboard in the manner of a mailing-tube, making the inside diameter the same as the diameter of the lens and using enough cardboard to build up the thickness of the tube until it fitted properly the brass-tube. The lenses, by the way,

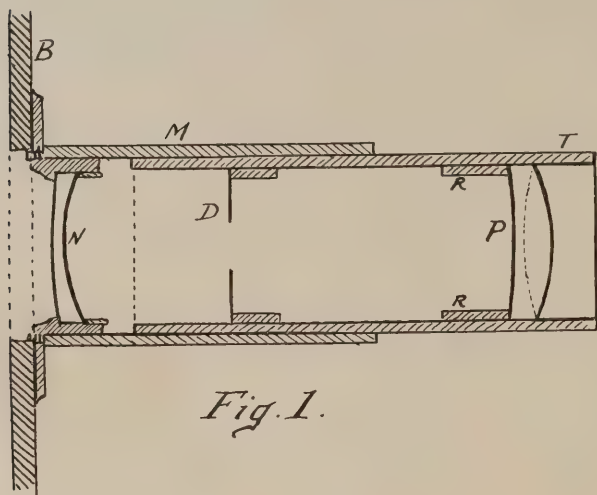


Fig. 1.



Fig. 2

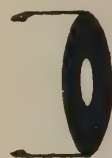


Fig. 2b

FIGURES 1, 2 AND 2b

WILLIAM S. DAVIS

to paper will represent the focus of the negative element. By this test my negative lens was found to have a focus of close to four inches, which rendered it suitable in this respect. It remained, however, to determine by actual trial whether satisfactory definition could be obtained when it was combined with the positive lens, for this was a simple unachromatic, whereas the negative-elements used in the construction of high-grade telephotos are always cemented or compound corrected lenses designed to overcome certain optical aberrations that affect the definition.

The method of mounting the lenses, utilising the original brass-tube as a part of the mount, is indicated in the sketch marked Figure 1. The brass-tube, *M*, is shown screwed into a flange on the lens-board *B* of the camera. The central stop has been knocked-out, thus leaving the inside space unobstructed for the reception of the

are $1\frac{1}{16}$ inch in diameter. The total length of the cardboard tube is $3\frac{1}{4}$ inches; but the positive lens is set back about three-fourths of an inch so the outer end of the tube will serve as a lens-shade. As this tube could not be made large enough to receive one of the brass lens-cells it was necessary to hold the lens *P* in position by means of a cardboard-ring, *R, R*, glued inside the tube—then after dropping the lens in place against this a circle of spring-brass wire served to hold it tightly.

After a little experimenting to determine the most effective position for the placement of a diaphragm, another collar or ring of cardboard was fastened in the tube at a point which brought the diaphragm, *D*, $1\frac{5}{8}$ inch from the inner side of the lens *P*. Figure 2 shows the pattern of the removable diaphragms as they were cut from thin sheet zinc. After pricking a hole in the exact center of each and reaming openings

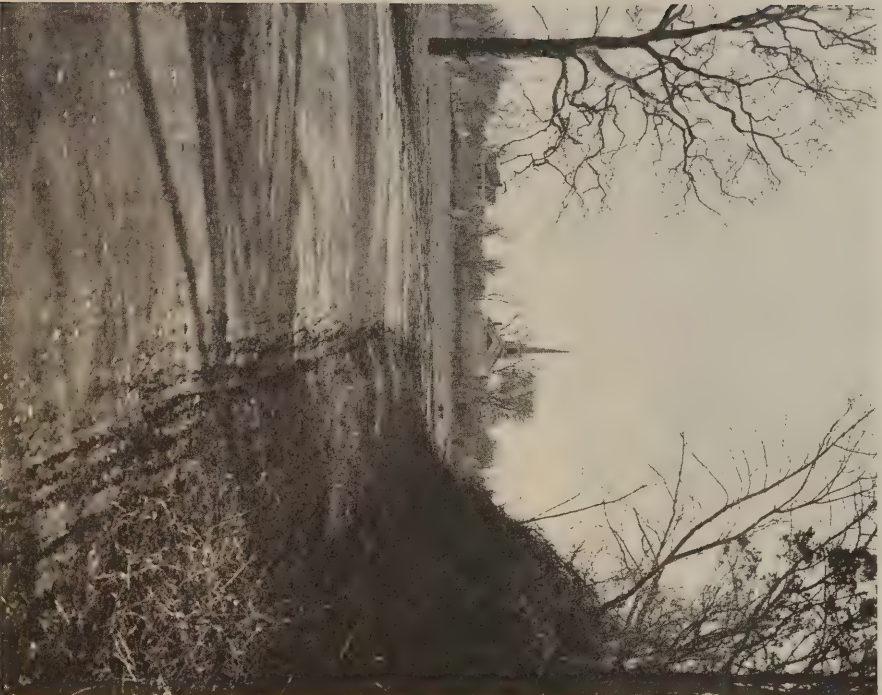


FIGURE 3



FIGURE 4

to the desired size, the prongs or ears on opposite sides were bent up at right-angles and the extreme ends turned-in slightly, making the finished diaphragms appear as in Figure 26. When required, the tube *T* is pulled out and a diaphragm inserted, the prongs serving not only to keep the diaphragm in position but as handles by which its removal is easily effected. I have two of these diaphragms, the smallest-sized aperture being $\frac{1}{4}$ inch and the larger $\frac{7}{16}$ inch in diameter. A diaphragm is not always required,

marks were placed upon the sliding-tube to indicate its position for different degrees of magnification; also the bellows-extension required in each instance. These data were obtained by simply measuring with a pair of dividers the size of image upon the focusing-screen together with the distance between screen and lens-board. Since the size of image produced by the positive lens alone forms the basis from which is computed the X-times of the magnification, I first focused sharply upon a distant object



FIGURE 5

WILLIAM S. DAVIS

however, as the lens gives a diffused image of pleasing quality for some purposes when used without a central stop. The diaphragms and inside portions of the tubes are blackened to prevent reflections.

Different degrees of magnification are obtained by sliding the cardboard tube in or out, a slight change in separation between the lenses producing a marked change in the size of the image and the length of the back focus. Within certain limits, the magnification is increased by bringing the positive and negative elements nearer together. However, I understand that the maximum separation of these elements must be less than the focal length of the negative lens, otherwise the back focus of the combination would be too short for any practical purpose. For convenience,

with the positive lens only in place—then, having taken note of the size of the image of this object, the telephoto was reassembled and measurements taken of the images obtained at different bellows-extensions. I found the system magnified the image three diameters with a bellows-draw of nine inches—this representing the back focus of the telephoto; four diameters with a draw of $13\frac{1}{2}$ inches, and five diameters when the distance between lens and focusing-screen was increased to eighteen inches. Perhaps these figures are not absolutely accurate according to theoretical standards, since there may be a deviation of a small fraction of an inch in the measurements; nevertheless, they are near enough correct for ordinary needs.

The size of the light-circle, and consequently



FIGURE 6

WILLIAM S. DAVIS

the size of plate covered, varies with the degree of magnification, being larger at high than at low degrees. The lens I've been describing covers a 4 x 5 plate when set for any power from 3X up.

The "F" value or working-speed of a given size stop-opening varies with the *equivalent* focal length existent at the moment of exposure, which, in turn, is governed by the ratio of magnification the lens is set to produce. Knowing the focal length of the positive lens, the equivalent focal length of the system may be found by simply multiplying the focal length of the positive lens by the X-times of magnification. Thus, if the positive is of six-inch focus and the telephoto is set to magnify three diameters, the equivalent focus will be 6 x 3: 18 inches. Thus applied, the term "equivalent" means that the size of image produced is the same as that which any regular camera-lens of eighteen-inch focal length would give from the same standpoint. Knowing the equivalent focus for each degree

of magnification, the "F" value of a given stop can be determined with sufficient accuracy by finding the existing ratio between the diameter of the aperture and the length of the equivalent focus. As an example, a $\frac{1}{4}$ -inch stop possesses a working-value of F/72 when the equivalent focus of the telephoto stands at eighteen inches, since $\frac{1}{4}$ -inch goes into eighteen inches seventy-two times. Incidentally, once the stop-values are worked out, as described, it is a good plan to either mark the figures upon each stop or make an entry in one's notebook, where they will be immediately available for reference.

With the exception of certain expensive types, composed of highly-corrected lenses of large diameter, telephoto-systems necessarily work at relatively small apertures, as the diameter of the largest possible opening is small as compared with the equivalent focal lengths at which the lenses are worked. This is the reason my "home-made" telephoto when used without a stop—*i.e.* at the full aperture of the lenses—

possesses a speed of approximately F/20 only, when set for 3X magnification; F/26 at 4X, and F/32 at 5X. Using the $\frac{1}{4}$ -inch diaphragm, the working-speed is F/76, F/104, and F/128 at 3, 4 and 5X magnification, respectively.

Owing to the limitation in speed, a shutter can be dispensed with and the exposures made with a loose-fitting lens-cap. While "time" exposures are the rule, these may be quite short in many cases, owing to the fact that the subject-matter is ordinarily further removed from the camera than usual and therefore less exposure is necessary.

Reference to the photographic illustrations will give our readers an idea of the results obtained when I first tried the lens. Figure 3 was made with an anastigmat lens of six-inch focus to furnish a basis for comparison of the size of image produced, the focal length of this lens being very nearly the same as the positive element of the telephoto, besides being the size commonly fitted to 4 x 5 cameras. Figure 4 shows the result of using the telephoto at 4X magnification from the same viewpoint. The exposure given was 4 seconds, using the $\frac{1}{4}$ -inch stop—effective value F/104—and 4 x 5 Eastman D.C. Ortho. plate, on a clear afternoon in early spring. Figure 5 was made the same afternoon. Doubtless this will strike many readers as a peculiar subject to turn a telephoto upon, as the general idea is that the use of such a lens is limited to distant objects. Long-focus lenses of any kind may, however, be employed at times upon nearby material with great benefit to the perspective of the image. In a woodland-bit, similar in character to our illustration, it is not uncommon to note trees in the immediate foreground which appear gigantic in size and others, no smaller in actual size but a little further removed from the camera, are made to look like match-sticks by comparison. This is simply the result of using a short-focus lens which covers a wide angle and getting up too close to the nearest objects. Therefore, excessive difference in the rendition of similar sized objects situated comparatively near to one another may be avoided by employing a long-focus lens whenever it is feasible to choose a more remote viewpoint. The latter was possible when making the photograph illustrated and I succeeded in getting all of the subject-matter desired with the lens set for about 3X magnification. This time I used the telephoto "wide open" to test the quality of the definition obtainable without a diaphragm. Although much of the scene was in shadow, the exposure of one second upon a double-coated plate produced ample shadow-detail in the negative. The open landscape

shown in Figure 6 was likewise made with the lens set at 3X magnification but with the larger ($\frac{7}{16}$ inch) diaphragm, which at a bellows-extension of nine inches has a working-value of F/44. This received an exposure of one second. The definition here is a trifle less sharp than that produced when the smallest stop is used, though it is probable the amount of softness shown in the tree-tops was increased somewhat by movement of the branches, as there was quite a strong wind blowing when the exposure was made.

Since making the photographs shown here, I've tested the lens more carefully to determine whether there was any difference between its chemical and visual foci, as it seemed likely that the lack of chromatic correction in the negative element would partly upset the full correction of the positive lens and so cause what might be called a semi-achromatic condition in the complete system. This proved to be the case, sharper definition in the negative being obtained by altering the distance between plate and lens after focusing visually as carefully as possible. The adjustment called for is, however, just the opposite to that required when working with an unachromatised positive lens; it being necessary to *increase* the distance slightly between lens and plate—a shift of half-an-inch being about right.

In conclusion, let me say I should not feel justified in writing at such length upon the making of a simple telephoto out of the parts of a discarded portrait lens if the success of the experiment hung upon the employment of a particular make of lens. However, such is not the case, as many an old lens of supposedly little value contains one if not both of the necessary elements. Moreover, new lenses can be purchased unmounted for very moderate sums from any large manufacturing optician and their mounting need not involve a great amount of skill or labor. If some means can be found whereby the negative element can be mounted upon the back of the lens-board, using a tube of suitable length, there is no reason that a high-grade anastigmat or rapid rectilinear lens should not be utilised for the positive element. If any reader cares enough about the matter to purchase lenses for the purpose, I would suggest that it might be worth while to spend a little more and obtain an achromatised negative lens instead of an uncorrected single element, particularly if the intention is to couple it up with a high-grade positive lens. As a means of increasing the available aperture—and in consequence the working-speed—it would also be worth while to employ lenses of large, rather than small, diameter in proportion to their focal length.

How Many Pictures Did Rembrandt Paint?



JOHN C. VAN DYKE, historiographer of art and professor at Rutgers College, has issued a book. He has studied every picture in the world by Rembrandt, and he has asserted that of all the seven hundred Rembrandt pictures which are acknowledged as originals, there are not more than thirty-five the real work of the master himself. The other six hundred and sixty-five, in the opinion of Prof. Van Dyke, were made by pupils of the master, or are works of falsifiers. Mr. Van Dyke asserts that there is not even one original Rembrandt in the Friedrich Museum of Berlin. But Mr. Van Dyke, though affecting a "grand style", went a little too far, writes Baron T. C. A. de Montagnoc-Voeroes, historiographer of art, in a letter from Budapest, Hungary, to the *New York Times*. There are other historiographers of art who have dedicated their lives to the study of the lives and works of great artists, including Rembrandt's. That Rembrandt painted very many pictures is a fact well authenticated. He died in his sixty-third year, and he began to paint in his early youth. We know of a picture that he painted at twenty years of age, the authenticity of which is not to be denied.

In the year 1631, he traveled from his native town, Leyden, to Amsterdam, where he worked for about ten years with an extraordinary diligence. He painted there portraits of the citizens of the town on their orders, and made one complete picture nearly every week in the period from 1632 to 1637. Rembrandt was never without work, and he dropped his brush only in the year of his financial breakdown. Even in his old age, he painted or made drawings and engravings. It is quite certain that in such

a long time, and with such diligence as his, he accomplished much more than thirty-five pictures; and if all the Rembrandt pictures of the museums of the world are fakes, somewhere the originals must exist. Even the pictures which are signed by Rembrandt and acknowledged as genuine works of his own number many more than thirty-five, the number indicated by Mr. Van Dyke as original Rembrandts.

It is true that Rembrandt had many pupils who were taught by him in the method of the period by which they had to copy the pictures of their master. There were more than a few of his pupils who could copy their master with real ability, but they copied only the external qualities, failing to reproduce the internal life and fire which are the peculiarities of the best works of Rembrandt. His works are all a part of his own personality and his own soul. Did any one of the pupils of Rembrandt reveal the genius of the author of "The Man with the Golden Casque", or the "Wife of Potiphar"?

Finally, there are the inventories of Hofstede de Groot that show the creditors of Rembrandt, among which are the inventories of Rembrandt's pictures, objects of cotemporary and later auctions. It is shown beyond doubt by these inventories that the work of the master is anything but exhausted by the seven hundred pictures already known as originals. Among the pictures on Biblical matters which are mentioned in the inventories of Hofstede de Groot there are more than a dozen which have not yet been discovered. Of his portraits there are even more yet to be discovered. The number, thirty-five, given by Mr. Van Dyke, is surely too small. But the truth is quite independent of the pet theories of the scholars.—*Picture and Gift Journal*.





MOUNT LOWELL, EAST WASHINGTON, N. H.

W. H. MANAHAN

The Height Beyond

AGNES BARNEY YOUNG

A PILE of rugged, useless earth,
 It might, at first, be judged to be,
 As, rising there in grand estate
 Above the land, unfettered, free.
 And, yet, upon yon bouldered side,
 There climbs from depths, by man, unseen
 A tiny rivulet that winds
 Until a brook on meadows green;
 Where, reinforced, it sweeps along
 To make a shining, rambling trail,
 A graceful river speeding on,
 Where supple willows, bent by gale,
 Now make a hiding place for trout,
 That seek a home in shady pool—
 For, scant the rays of springtime sun
 That creep between the willows cool.
 And, as the stream flows laughing on
 Although so care-free and so gay,
 It brings from out the mountain's heart
 Its riches, and along the way
 Are left the needs for famished soil—
 The minerals that compensate

For bleeding of the lowland fields
 By harvesters at Autumn's gate.
 O mountain grand! not selfish thou—
 For years, yourself, you've freely given
 To toilers in the vales below;
 For distribution, just, you've striven.
 If never reared a mountain grand
 With wooded slopes and barren peak,
 Ah, desolate would be our hearts!
 No place for game of "hide and seek"
 By busy sunshine's shifting rays,
 That, restless, seek the waters still—
 And, then, impatient, flit afar,
 And light the top of yonder hill.
 The misty lacework, banks of fog,
 Deep purple shades of sunset light,
 White garment fashioned by the frost
 'Neath spangled canopy of night—
 Who hath not seen these wondrous sights,
 And learned to love a mountain-crest,
 Has missed the part that Nature planned
 To spur him on to do his *best*.



EDITORIAL



Offensive Eccentricity and Success

THE persons who read the Publisher's objections to photographs in the nude, so far as they masquerade as works of art—see the July issue of PHOTO-ERA MAGAZINE—cannot but be profoundly impressed by the sincerity of the writer's views. Personally, we heartily endorse these frankly expressed objections. There can be no doubt that most camera-nudes are produced without the least intention to elevate photography, and that they lack a reason for being—unless it be to achieve notoriety or publicity for their authors. Unless portrayals of the nude are chaste and artistic, they are mere expressions of vulgarity. A case in point is the collection of prints of Miss Kate Smith, exhibited in a room of the Royal Photographic Society, London, England, last May, which we had an opportunity to inspect. In our opinion, the one outstanding merit of the exhibit was the manifest thematic variety, and the least worthy feature, the large number of semiclassic nudes. These figures of imaginary nymphs and fairies, arrayed in scant, fantastic costumes of diaphanous fabric, else entirely undraped, were also noticeable for their strained, unnatural and inartistic attitudes. Like many others of their kind, they were grotesque and offensive. They had been produced evidently with the intention to create a sensation and to invoke criticism, favorable or adverse. They were the subject of caustic comments by the "Walrus" and other critics, whereas no notice might have been taken of these representations of fictitious characters, had they conformed to the laws of probability.

Protecting the Photographic Print

THE book on the subject of taking proper care of pictures—paintings and watercolors—in the home, is yet to be written. In his "Spain", the famous traveler and author, Edmondo De Amicis, speaks feelingly of the sad state of priceless paintings in the art-museum of Seville—numerous bits of paint had peeled off and lay on the unswept floor! This process of disintegration of pictures that date from the XV and XVI centuries must have been going on for many years, owing to the apparent lack of funds or interest to save them from ruin. The question of

how a valuable oil-painting is to be cared for, after it has left the hands of the artist, is yet to be satisfactorily answered. Even the artist himself is undecided as to whether his work shall be varnished, whether it ought to be glazed, or when it shall be cleaned. Some painters recommend that the surface of an oil-painting receive a thin, uniform coat of mastic varnish after an expert has declared it to be completely dry. But how is the purchaser to know all this?

To illustrate, let us take the case of an old family-portrait. Shall it be cleaned? If so, by whom? Of course, there are skilled and trustworthy picture-restorers in nearly every large city who may safely be entrusted with this important task. Valuable paintings, now more than ever, are exposed to deleterious influences, such as overheated homes, dampness, coal-dust, gas-fumes and the absence of daylight-illumination. Instances have come to our attention where paintings have been seriously affected—cracked, faded or darkened—by being allowed to hang against superheated walls directly behind which the pipes of the heating-system of a modern, wretchedly constructed apartment-house are situated. The occupant of one of these flats was entirely unaware of the danger to which his art-treasures were being exposed, and when he made this unpleasant discovery, he promptly moved.

A favorite method used by some Dutch water-color-painters to protect a picture from dust and other evil influences is first to hermetically seal it, by binding glass and picture together with adhesive tape—after the manner of the old-fashioned passe-partout—and then to fit it tightly into the frame. Finally, the entire back of picture and frame is covered with stout paper or a close fabric by means of glue. This covering affords additional means of protection against possible impairment or deterioration.

This method of protecting valuable pictures can be easily applied to photographic prints—chlorides, bromides, platins, gums, bromols. Like watercolors and etchings, photographic prints are susceptible to impairment from dampness. The maker of a beautiful pictorial print, after having exhausted his skill to make it as permanent as can be done, should see that it be framed to withstand the injurious effects of our capricious climate and of varying prejudicial indoor conditions.



ADVANCED COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.



Prizes

First Prize: Value \$10.00.

Second Prize: Value \$5.00.

Third Prize: Value \$3.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already subscribers* will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes may be chosen by the winners, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, suitably engraved.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

All competition-pictures not returned are used to make up the PHOTO-ERA PICTURE EXHIBIT which is sent to schools, libraries, museums, camera clubs and to responsible organisations for exhibition-purposes, *free of cost*.

Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. Not more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered into competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

3. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. Prints may be mounted or unmounted.

4. Each print must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer, and printing-process. Enclose return-postage. Data-blanks sent at request.

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he shall have received official recognition.

6. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces is sent with data. Criticism at request.

7. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

8. Competitors who have won three first prizes within a twelvemonth become ineligible to compete for prizes in this competition for *one* year thereafter.

Awards—Advanced Competition

Subject—Real Sunrise and Sunset Pictures

Closed August 31, 1925

First Prize: Hiromu Kira.

Second Prize: Wm. O. Yates.

Third Prize: Chas. A. Hellmuth.

Honorable Mention: A. Caskey; William Davis; E. K. Emslie; Miss G. Finnie; Frank H. Foster; Allen Fraser; Duane P. Hotchkiss; Mrs. Dorothy Jarvis; John H. Kemp; Edgar L. Kline; James Lee; R. Morita; Joseph Oliver; Francis Parrish; W. H. Pote; Chas. T. Ramsden; Nicholas A. Romano; John O. Scudder; Maurice Smith; Vincent W. Stelcik; A. L. Tracy.



Subjects for Competition—1925

"My Home." Closes January 31.

"Miscellaneous." Closes February 28.

"Indoor-Genres." Closes March 31.

"Table-Top Photography." Closes April 30.

"Artificial Light Photographs." Closes May 31.

"Miscellaneous." Closes June 30.

"Front-Cover Illustrations." Closes July 31.

"Real Sunrise and Sunset Pictures." August 31.

"Wild and Cultivated Trees." Closes September 30.

"Miscellaneous." Closes October 31.

"Lakes, Rivers and Brooks." Closes November 30.

"Interesting People and Places." Closes Dec. 31.

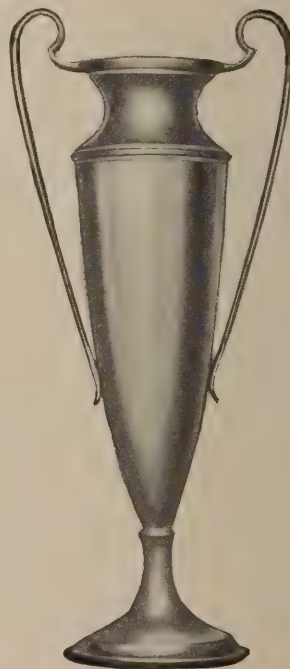


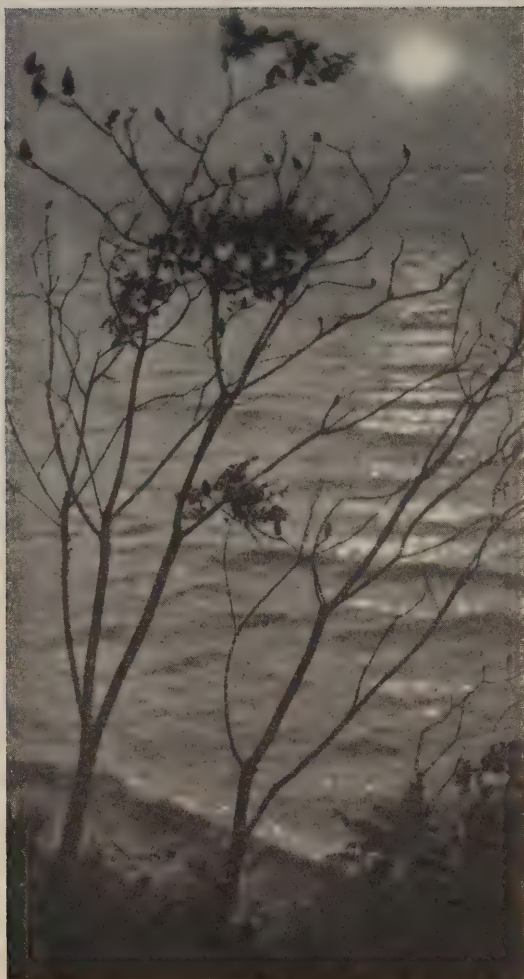
Photo-Era Prize-Cup



THE SUNSET

FIRST PRIZE—REAL SUNRISE AND SUNSET PICTURES

HIROMU KIRA



AT EVENTIDE

WM. O. YATES

Advanced Competition

IN contemplating the glorious view spread out before him, on the preceding page, the beholder is unable to repress a murmur of admiration and pleasure. Here, Nature rejoices in one of her enchanting moods. In turning his attention to the skill of the artist, one is quick to recognise and acknowledge it. In studying the artistic qualities of the picture, the critical observer perceives the knowledge and application of the principles of pictorial design which have resulted in a well-planned and satisfying composition. If circumstances, over which the camerist had no control, could have contrived to dispense with the broad splash of light reflected on the placid waters, and if the long, tenuous cloud at the left of the sun could briefly have assumed a less low tonal quality, the total result would have been more gratifying, more restful. Even so, the beauty of a real sunset has been well interpreted.

Data: Made near Seattle, Wash.; September, 7 P.M.; good light; 4 x 5 Graflex; 8 $\frac{3}{4}$ -inch Verito lens; stop,

F/6.3; 1/75 second; Eastman Cut Film Commercial Ortho; Premo Developer; enlarged on P. M. C. No. 8.

Owing to a favoring wind, the uneven waters of what may be Lake Erie, made possible a judiciously rendered series of reflections—a circumstance of which Mr. Yates with true artist instinct wisely took advantage. An effect of this kind is much to be preferred to the long band or streak of blinding reflection so often cast by the sun. Against his successions of gently lighted waves, Mr. Yates has placed the slender, leafless branches of some young trees, thereby forming an unique and pleasing pattern—a sort of foil to the solar reflection. Then, too—if not chiefly—he elected to allot the somewhat hazy orb with its mirrored images to a place away from the center of the picture-area. Thus, and with a suitable, low-toned foreground, our artist emerges with a graceful and capably constructed composition.

Data: September, 6.45 P.M.; hazy light; 1A Junior Kodak; 5 $\frac{3}{8}$ -inch R. R. lens; stop, F/8; KI color-screen; Kodak Film; elon-hydro; P.M.C. Buff No. 8 Normal.

Although solicited by the Publisher, the sunrise pictures were few and far between in this competition. Why? Because as expected, the average camerist seems to prefer his morning-rest to picturing a sunrise even in beautiful summer-time. Even Mr. Hellmuth, the author of the prize-picture, on this page, appeared to be unable to get to the scene of action until after 6 A.M.! I sincerely hope that our unsparing critic, E. L. C. Morse, will not approach these brilliantly lighted harbor-waters in any spirit of skepticism. We surely rely on the veracious data of the artist, and the jury would be the first to question the statement of any contributor. Mr. Hellmuth included in his

Painted on canvas stretched with nails on 14 x 17 wooden stretcher which was clamped to sketching-easel. A folding camp-stool 16 inches high with 8 x 10 canvas-top and studio-mahogany-palette 24 x 16, and japanned palette-cups were used.

Prepared oil-colors in 39 different single collapsible tubes, with turpentine, pale drying-oil, palette-knife, 4 red sable and 7 superbristle brushes, badger blender No. 6 and many other tools like: pencil, porte-crayon, charcoal and canvas-scraper were in action. The painting was done with the brushes held firm in the artist's hand at arm's-length and so forth and so on.

Doesn't this seem absurd? And still similar ques-



SUNRISE

CHARLES A. HELLMUTH

THIRD PRIZE—REAL SUNRISE AND SUNSET PICTURES

pictorial design a basic foreground about which there can be doubt. A bit too vigorous, a bit too low in tone—doubtless, the result of underexposure. The recession of rocky entrances, though seemingly departing from physical accuracy on account of their dark, featureless appearance, is the chief artistic feature of this unusual picture.

Data: Rockport (Mass.) Harbor; September between 6 and 7 A.M.; bright sun; Premo No. 9; 8-inch Cooke F/4.5; at F/16; 1/100 second; Premo Film Pack; enl. on Wellington (Bromoil) Bromide; M. Q. for film and paper.

WILFRED A. FRENCH.

Mr. Weber "Starts Something"— How About It?

THE oil-painting which was recently exhibited under the title "Sunrise" had the following data:

tionnaires or data-blanks have to be filled out for almost every camera-picture which we send to competitions. Why not judge just the picture alone?

Photography will never rise in the Arts, as long as such things are practised!

Real Art is only attained when we can completely forget the material with which the masterpiece is produced. To the painter or sculptor it is immaterial which tools he uses, only the result is what counts.

Every photograph should be judged from this point only. To make six pictures is not as nerve-straining as to fill out one question-sheet. People who can paint are disgusted when they show a photographic picture and then are annoyed by the 1001 questions asked by the pictorialists.

Let us forget about the questionnaires or data-blanks and put photography at par with the other Arts.

ALFONS WEBER.

CHICAGO, ILL.



SUBJECT FOR NEXT COMPETITION ADVANCED WORKERS



AROSA VILLAGE

WILL CADBY

Advanced Competition—Interesting People and Places Closes December 31, 1925

WE have not in many years had a competition which was planned to encourage our readers to give pictorial attention to interesting people and places. Of course, the places will be more readily accessible than the people, and we shall have many good pictures of the Statue of Liberty, Washington Monument and Brooklyn Bridge; but not so many of President Coolidge, Henry Ford or the French Ambassador. Yet, with all due respect to the men and women who are much in the public eye, are there not interesting people right in our own home-town? Are there not those who through industry and strength of character may well merit the attention of the pictorialist? Let us see whether or not the camera can find and portray that which makes a man or a woman interesting.

Perhaps no competition held thus far will be of greater practical value in helping to train our readers in what newspaper men call "the nose for news". In short, it will be for each contestant to decide what is interesting about this man or this woman and then make that person live for others by means of photography. The same thing may be said of interesting places and their pictorial treatment.

It might be well to suggest that there is a difference between what is curious and that which is really interesting. A wart on a man's nose may be curious; but is it interesting? Let each possible subject be well considered before the exposure is made. If possible, let the interesting place or person be so photographed that the beholder will exclaim, "I never realised before how much a good photograph can tell about interesting people and places".

A. H. BEARDSLEY.



BEGINNERS' COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value \$5.00.

Second Prize: Value \$2.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are not regular subscribers will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are already subscribers will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes, chosen by the winner, will be awarded in photo-materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

Rules

1. This competition is open only to beginners of limited experience with practical camera-activity, and whose work submitted here is without any practical help from friend or professional expert.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints and enlargements up to and including 8 x 10 inches.

4. Prints representing no more than *two* different subjects, for any one competition, and printed in any medium except blue-print, may be entered. Prints may be mounted or unmounted, as desired. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

5. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail.

6. Each print entered must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent at request. Criticism at request.

7. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he has received official recognition.

8. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with data.

9. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

Awards—Beginners' Competition

Subject—Miscellaneous

Closed August 31, 1925

First Prize: Margaret Parsons.

Second Prize: Godfrey Priester.

Honorable Mention: James Bell; H. A. Haeckler; S. Horino; R. P. Sundararaja.

Beginners—How About This?

EVERY ONE of us has his or her convictions about this or that problem. Usually, it requires much time and patience to work out the right solution. For a long time I have been eagerly and sincerely trying to arrive at a solution of the problem presented by the average beginner in photography. I have studied the efforts of my cotemporaries and have gained much helpful and valuable data. Moreover, I have written many letters to those who I felt were qualified to express a constructive opinion and who might suggest ways and means to bring to the average beginner that which he needs to make him grow in photographic skill and enthusiasm.

Let me say that I have always taken the position that the future of photography rests squarely upon the shoulders of the beginner. In making this statement I do not for a moment lose sight of the splendid work for photography that is being done by those who have won their well merited title of pictorialists and salon exhibitors. Yet, only a few years ago, these very same men and women were beginners. In the comparatively short time of fifteen years I have seen many snapshooters begin humbly in our competitions and win their way to the top through hard work and sustained enthusiasm. However, these men and women cannot always hold their positions. Time is a relentless foe; and, in due course, age will play havoc with those who today are the stars in the pictorial firmament. Therefore, new life, younger men and women, must carry on, and they must be trained now.

Beginning with the new year, PHOTO-ERA MAGAZINE is going to make a sincere effort to make this department one which will do its part to make secure the pictorial work of the future and hence the continued growth and value of photography. Just what means will be adopted will not be divulged at this time, nor will further constructive suggestions be unwelcome. Frankly, between now and the January, 1926, issue, I shall feel indebted to any and all readers who will take the time to tell me just how they think the Beginners' Department can be made truly helpful, inspirational and attractive reading to those who know little about photography. Let us have something different—something that is human, friendly, practical and welcome. Times are changing and we need to adapt ourselves to these changes. Methods, once excellent, are now obsolete. There must be life, power and enthusiasm—a bit of humor and that friendly interest which is sincere and founded upon true service. This department is going to be different and it is going to meet the needs of the hour; and, my readers, we can do it together.

A. H. BEARDSLEY.



A SUNFLECKED SAIL

MARGARET PARSONS

FIRST PRIZE—BEGINNERS' COMPETITION

Beginners' Competition

THE members of the Jury were obliged to look twice at the particulars on the back of Margaret Parsons' little masterpiece of a marine—shown on this page—before they were convinced that it was entered in the Beginners' Competition. The artist's own, hand-written data, before me, reassured me that there is really no mistake in this respect. The picture is so good, the theme so well conceived, so beautifully executed, so attractive in the final result, as to fill me with an eager desire to show it to some of my artist-friends for inspection and—approval. It is ideally simple in design; yet it suggests delightfully the beauty of an inland sea, or of a great river like the Sungari, in Manchuria, on which Harbin is situated—the present abode of the author of our picture, "A Sun-flecked Sail". The proportions of the picture, the prudent division of sea and sky, the placement of the oriental craft, the superb sky and the pleasing tonal quality are such as to give me a feeling of complete satisfaction and joy.

Data: Made in Manchurian waters; 7 P.M.; Ica Reflex Camera; Carl Zeiss Tessar, F/4.5 lens; at full aperture; 1/15 second; film developed with Rodinal (1 in 10); printed on Bromide.

The reader is now facing a typical Cape Cod interior, by Godfrey Priester. As if proud of his New England antiques, he has exposed them to excellent advantage, at the same time, no doubt, hoping to create an agreeable, artistic composition, although this would seem to be a somewhat difficult task. The beholder who is interested in old-time household furniture and souvenirs, will easily identify the spinning-wheel and warming-pan, a carved three-footed stand and other cotemporary objects, useful or ornamental. The discriminating observer regrets, however, that the same characteristic of bygone Puritan days, as shown, should be marred by the conspicuous presence of a photograph of a modern picture—Millet's "Angelus", when an engraving of "The Landing of the Pilgrims" (1620 A.D.), easily

procurable, would seem to be in better keeping with the general atmosphere of the place. Technically, Mr. Priester's effort is highly commendable, lighting, lens-work, exposure, development and print leaving nothing to be desired.

Data: Made on Island of Martha's Vineyard; May 15, 1925; 4 P.M.; good light; Carl Zeiss Tessar, F/4.5; stop, F/18; Compur Shutter; 1/2 second; Eastman L. Ortho Non-Halation Plate; elon-hydro; print, Azo Paper.

WILFRED A. FRENCH.

What Worlds Away!

THE tyranny of success has filled us with an uneasiness at any falling short. So constantly and persistently do we praise the nearness to perfection that inadequacy has at last become, in our estimation, a sin; we have lost our sense of the comparative, and our consciences are forever urging us to a state we can never reach, and, did we but understand, would not reach if we could.

There is virtue in the falling short. And, indeed, in our daily speech and intercourse we recognise and welcome this inevitable failure. There is a certain sadness in the man who is both fluent and sincere; for it is notorious that he who can write a pleasing letter never receives a reply. In these matters, we have an instinctive fear of perfection. And so it is in our speech: the well-turned compliment becomes, not a source of gratification, but a source of suspicion. It is the halting, disjointed phrase of approval or affection upon which we tenderly smile our greeting; and we do this, not out of a mere friendly sympathy for one who is floundering in the universal seas of an inexpressible appreciation, but because we feel that the appreciation is, indeed, great enough to be inexpressible. There is the making of great literature in the awkward phrase.

Yet, in spite of our toleration and patience in these matters of daily importance, when we come to criticise

our own pictures, or the pictures of our fellow photographers, all our kindness is scattered in the winds of an urgent ideal: and we demand nothing short of perfection. The perfection we demand is not so much perfection in the picture as perfection in the representation. We feel that imitation is, indeed, the sincerest form of flattery; and that praise of Nature is inadequate unless it be exactly like Nature itself.

It is so hard to say "Thank you"; and, when we have a special cause for gratitude, we wish in vain for some words more adequate than these two, which are thrown back and forth for every trivial service and courtesy of the day. So it is, perhaps, with the photographer: he seeks some better "Thank you" than that which he records by every little snapshot

bothered. So he wastes his time and his money. But it is his own affair; and if he thinks he is getting the worth of his money, it's none of our business. As soon as he gets tired of photography, he drops it. But, as Barnum said, there is another one born every minute.

As explained in a previous article, correct, scientifically correct, exposure can be ascertained by the use of meters. These meters as a rule show the least amount of exposure that will give a good print. As a rule it is better to give a generous exposure, "generous" being used in the photographic sense of double the time for a correct minimum exposure. That is to say, err towards overexposure and never towards underexposure.



INTERIOR

GODFREY PRIESTER

SECOND PRIZE—BEGINNERS' COMPETITION

of his holidays; and he is daring enough to suppose that he can equal Nature in expressiveness.

But Nature is ever elusive; and never more so than in this. Sometimes she vouchsafes to some lucky being a swift understanding of her mood; and we call that man a poet. But even he knows only the mood; and all his understanding is surrounded by a darkness which marks his humility. Here, then, is your justification for the inevitable failure. The virtue of the falling short is its confession of inferiority; and you make your picture, not a swift and defiant retort to Nature's display, but a faint and far-off echo, praising its mistress by its own inadequacy. If there is a perfect picture, be sure it is detestable.

J. GARNETT HARPER in *The Amateur Photographer*.

Generosity and Frugality in Photography

THE commonest fault of the beginner in photography is underexposure. At least, so all of the men who make a business of developing such monstrosities say. The beginner doesn't think and he doesn't want to be

Then, there is the question of development. Probably a good many plates and films are overdeveloped. Of course, there is the druggist's assistant who forgets and leaves the mess in the tank too long—and lays the blame on the amateur. Then, there is the amateur who develops in a tray too long in the hope of getting out something that is not in the emulsion because of underexposure.

But probably most private amateur developing is done in the tank. The consensus of experts is that it is a good general rule not to overdevelop, that is, to develop a shade less than the time advised by the manufacturer—provided you want an artistic picture with gradations, clear highlights and luminous shadows.

The advice may be put in this form: Expose generously and develop with frugality—or, overexpose slightly and underdevelop slightly, if you want artistic work.

A. B. C.



"THE photographers never do me justice."
"You want mercy, me dear, not justice."



OUR CONTRIBUTING CRITICS



STEEPLE AND ROOFTOP

E. S. SMITH

THE PICTURE CRITICISED THIS MONTH

Whoever sends the best criticism (not over 200 words) before the last day of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

THIS picture will no doubt be well criticised. I hardly know whether to classify it as a record or as a pictorial study—or whether it represents Art or eccentricity. It has, however, two outstanding features which can be commended: the unique composition and the technical work. Mr. Smith deserves praise for handling the subject in an unusual manner. The steeple may have some interesting feature—perhaps historical or architectural; but the rooftops seem commonplace. To me, the top of the picture appears empty, and the bottom too crowded. If it wasn't for spoiling the shape of the picture, I would suggest that about $\frac{3}{4}$ inch be trimmed from the top—just above the clouds. One has to have an artistic temperament to really appreciate pictorial enigmas like

“Steeple and Rooftop” and Margaret Watkin’s “Curves”—recently reproduced in a contemporary. Their success depends largely on the viewpoint of the critic. The soft-focus man would probably suggest enlarging, using a soft-focus lens to impart vagueness and atmosphere. However, sincere efforts like this one will better American pictorial photography because it may be an inspiration for others to attempt different treatments.

ARTHUR H. FARROW.

LOOKING at the picture, I wonder what is the center of interest. Judging from the title, it must be the steeple; but the roof, somewhat distorted at the lower right corner, is too large and catches our eye first. Moreover, the dense foliage at the upper right corner is too attractive. As a result, there are two centers, the steeple and the roof, in this one picture. I will not say that it is worthless, and throw it into a waste-basket; but I know my duty, as a critic, is to save the print, if possible. Divide the picture into two parts straight in the middle line and look at each side with care.



CABIN IN THE WOODS

HAKON HAUG

YOUR CRITICISM IS INVITED

You see the left half is more suitable to the title, I am sure. The photographer may keep it in his album as a memory. But what interest the photographer found from those confused roofs is a question. They have no interest and are poorly shaped. He must consider the composition more keenly before making a picture and try it once more from another angle, if he wishes to be a promising pictorialist in the future. To snap subjects at random and to make a lot of records is not helpful to the development of photographic ability.

Dr. K. KOIKE.

THE upper part of this picture is delightful; the lower half is horrid. The trees would have stood a little more exposure, but we recognize that the sky wouldn't, and the both had to be photographed at the same time—unless, indeed, the sky has been printed in subsequently, which seems improbable. As they stand, the sky and the tree are delightful—one of the best cloud-pictures that has appeared in PHOTO-ERA MAGAZINE for many moons. The shadow of the nearby roof is luminous and convincing.

But, oh, the rest of the picture! Such a jumble of lines and masses! Lines horizontal, lines vertical, lines diagonal, lines running helter-skelter—forming almost every possible geometrical figure. They give one the “willies” to look at them. And clapboards—who wants a photograph of clapboards? Clapboards contrasting with the dreamy, poetic sky of summer!

And the steeple is simply hideous with its lack of mass and its exiguous form—more like a spike than an essential part of a church, though doubtless the *tout ensemble* of the church if photographed by itself and its surroundings would be impressive.

Finally, the photographer ought to ask himself always this question when making a picture: “What particular idea, what thought or emotion am I trying to convey to the world through the medium of photography?” Did E. S. Smith have any such project in mind in making this picture? I am afraid not.

E. L. C. MORSE.

THE effort, “Housetop and Steeple”, is very pleasing indeed, and a picture that reflects much credit upon its maker. The print as a whole has a delightful atmosphere—no doubt largely due to correct exposure. The tones are full and give a suggestion of depth. The concentration of interest is exceptionally well done. The eye first strikes the steeple and housetop just as naturally as a duck takes to the nearest water. However excellent the concentration of interest now is, it may be improved further by trimming approximately an inch from the top of the print. Another result of such an operation would be better balance of the tones. It is evident that the dark, tall mass has a tendency to overbalance the light-tones on the left.

The most serious criticism I can offer on this print

(Continued on page 285)



OUR ILLUSTRATIONS

WILFRED A. FRENCH



SALUTE Captain A. H. Beardsley, Signal Corps, U. S. Army! You will read with interest and satisfaction his modestly told exploits as an aerial photographer, although, according to his admission, only as a beginner. But if Margaret Parsons (page 280) and other beginners before her can "soar to the heights" of full-fledged pictorialists, why cannot our worthy Aeronaut-Publisher? A critical examination of his aerial camera-results, pages 245 to 251, will show that they compare favorably with those of aerial photographers of longer experience.

We are glad that Publisher Beardsley has been able to gratify a long-cherished ambition to "dive" into aeronautics, and to fly high, although he was never a "high-flyer", but a man of high ideals, with his head among the clouds (at vacation-time). He has soared high among the great, open spaces he loves so well on *terra firma*; snapshotting earthward; looking down upon us ordinary mortals; nosing around, and spinning yarns, and never afraid to face the music. Having ascended to lofty regions, he finds us thankful that he has descended safely to earth. Incidentally, Mr. Beardsley is the only photographic editor-publisher in the United States or Canada who has had his aerial experience and can speak from first-hand information obtained while in the air.

Although the group of portraits, page 255, is not capable of being reproduced satisfactorily in one block, and inasmuch as the first two in the upper row and the middle one in the last row have already appeared, admirably halftoned, in past issues of PHOTO-ERA, the critical observer will be able to gain a fair impression of Dr. Kilmer's rare artistic skill in the field of portraiture. It must be evident to the experienced observer that, reproduced separately, each of these nine portraits would appear more advantageously than at present; but for the purpose of showing the photographer's power to interpret the individuality of each sitter, they answer fairly well.

Apropos of individuality in portraiture, "Collie", page 256, is undoubtedly a domestic pet, and as such differs from other canines. Whatever may be the pleasant side of his nature, that which makes the strongest appeal to his master, one may be sure that the photographer, Mr. Provo, has expressed it successfully and artistically as well. A print of "Collie" was hung at the annual show of the P. P. of A., 1925. This is also true of the remaining six pictures of this series, on pages 256 to 262.

Data: "The Collie"; July, 9 A.M.; bright; Ica Reflex ($3\frac{1}{4} \times 4\frac{1}{4}$); 16.5 cm. Orix lens; at F/4.5; 1/150 second; Film Pack; pyro; Wellington Bromide; metol-hydro.

"Look, Mammy!", page 257, is one of the most engaging themes of child-life I have seen. The subject has been treated with exceptionally artistic judgment—in attitude and expression, spacing and technique. With admirable discretion, the artist has contrived to keep the water splashed by the feet of the pickaninny from becoming too assertive, in this way maintaining a foreground wisely low in tone.

Data: "Look, Mammy!"; near Cleveland; August, 2 P.M.; bright sun; 4×5 Reflex; $7\frac{1}{2}$ -inch Turner-Reich; at F/8; 1/25 second; Orthonon plate, pyro; print, Carbon Black.

"The Temple-Arch", page 258, is a gem of architectural photography—i.e., as the artist-architect would want it represented. Nevertheless, Mr. Friedberg, with an eye for the artistic, has kept his flight of steps well subordinated, the treads of the steps, while naturally well-lighted—in this case—being invisible in the picture. Thus, the eye is led from the lower plane up the stairway towards the chief visual point of interest—the beautiful row of arches. As a whole, the picture is a superb piece of photography.

Data: Made at Cleveland; April, 6 A.M.; bright; $3\frac{1}{4} \times 4\frac{1}{4}$ R. B. Graflex; $7\frac{1}{2}$ -inch Tessar; K2 ray-filter; Eastman Panchromatic Cut Film; pyro; print, Novabrom.

Every camerist knows how difficult it is to arrange ruminating animals into a satisfactory group. No cow or a sheep must be shown as meandering out of the picture, unity of attitude being a desideratum in this kind of picture-making. In his "Pastoral", page 259, Mr. Cleveland demonstrates how delightfully a meditative group of sheep may be photographed; also how to select a pleasing, appropriate setting. The atmospheric quality and perspective as well as the happy spacing are distinguishing features of his print.

Data: Made at Mentor, Ohio; Deckrullo Nettel ($2\frac{1}{4} \times 3\frac{1}{4}$); $4\frac{3}{4}$ -inch Carl Zeiss Tessar; K1 ray-filter; Eastman Panchromatic Cut Film; Adurol; print, Wellington Bromoil.

In contemplating "The Toilers", one seems to feel the motion of the horses as they cross the field to be ploughed. The direct sunlight-illumination appears a bit too strong for the attainment of the finest artistic effect, although the rendering of all existing detail and *nuances* is not absolutely necessary to every successful pictorial photograph. One admires the energy and spirit, life and go of Mr. Clarkson's agricultural scene, the characteristic and superbly rendered setting, although it seems to me that about half an inch might well be spared from the lower part of the reproduction, reducing the restless though truthfully typical foreground and improving the spacing. Unless the photographer believes in unaltered realism, the highlight under the nearest horse could be slightly and advantageously lowered.

Data: "The Toilers"; made on Gates Mills Farm, Ohio; May, 3 P.M.; bright sun; $3\frac{1}{4} \times 4\frac{1}{4}$ Graflex; 7-inch Bausch & Lomb lens; at F/11; 1/50 second; Eastman roll-film; pyro; print, Wellington Bromide.

Although the title, "Morning-Glory", is usually associated with a matinal flower, it seems aptly to fit Mr. Hartman's beautiful marine, made apparently at sunrise, page 261. What a welcome addition it would have made to our "Sunrise and Sunset Pictures" competition illustrated in this issue! The imaginative quality of the scene, its restful tranquillity and poetic charm, are seductive and ingratiating. As the motionless craft is already advantageously placed in the pictorial design, there is no need of the large, dark mass at the left. In its present conspicuous state, it is superfluous, and also draws the eye of the observer needlessly to the left—unless the artist designed it to counteract the possible outward tendency of the vessel. If Mr. Hartman could be induced to abbreviate the foreground by, let us say, half an inch, he

would lower the line of the horizon and divide sky and water into unequal parts—an artistic improvement of his already attractive marine.

Data: "Morning-Glory"; hazy bright; 4 x 5 Korona; 9½-inch Tessar Ic; at F/4.5; K1 ray-filter; 1/100 second; Agfa Film Pack; pyro; print, Defender Enlarging Bromide.

The, at this time, somewhat significant subject, "Coal yard", page 262, has been skilfully treated by Charles Lederle. The precious mineral is as obscure as the artist has dared make it, consistent with good, pictorial effect. With commendable discretion, Mr. Lederle has not attempted to lift the cart, the coal-supply and the willing workman from the pitlike darkness in which they are enshrouded. On the contrary. The horse, a sympathetic observer of what is going on, stands out in bold relief, seemingly monopolising the illumination, whatever its source. The openings at the left side of the shed serve to increase the character of the place, which, in the exhibition-print—shown at the Salons of San Francisco, 1923, and Buffalo, 1925, and the animal show of the P. P. of A., 1925—must have appeared to greater advantage than in the considerably reduced halftone-reproduction.

Data: "The Coal-Yard"; June, 2 P.M.; sunlight; 3¼ x 4¼ Graflex; 7½-inch Tessar Ic; at F/8; 1/20 second; Premo Film-Pack; developer; Premo Tank Powder.

William S. Davis, whose work as a successful pictorial photographer has been known to our readers for a period of many years, and which continues to be masterful and inspiring, appears this month simply in the capacity of demonstrator—showing the construction and application of a telephoto-lens. Therefore, his illustrations, pages 267 to 269, have only meagre pictorial value.

William H. Manahan, of Hillsboro, N.H., is a professional worker of notable ability and success. Landscape-photography is a diversion with him, as it is the case with other fellow-portraitists. Mr. Manahan has served the Photographers' Association of New England as president for several years, and at the annual conventions of this body has exhibited specimens of his regular work, also a number of landscapes in the capacity of amateur. The latter were conspicuous for boldness of pictorial design and superb technical qualities. Unfortunately, "Mount Lowell", East Washington, N.H., page 272, does not belong to this class. Here, Mr. Manahan is clearly not at his best. The picture seems to lack unity in composition, and a timidity in expressing the beauty and charm of New Hampshire scenery. I, for one, voice the hope that this capable artist may favor these pages with a print that is truly representative of his pictorial skill, to which I have often referred in terms of praise.

The exceptionally rare and attractive aspect of the Swiss village, Arosa, page 278, appeared first in the September issue, 1923, and, as it also evidences the photographic skill of our London correspondent, Will Cadby, it repays republication. For data, please consult "Our Illustrations" of that date.

Honorable Mention

FOREMOST among the numerous admirable Honorable Mentions in the "Real Sunrise and Sunset Pictures" competition is Allen Fraser's sunrise, including the U. S. S. Los Angeles, which constitutes the frontispiece of this issue. Although the German-built air-ship occupies the exact center of the sky-area, the general effect is spectacular and striking. Had Mr. Fraser been able to make the exposure a few seconds sooner,

the great dirigible would have occupied a pictorially better position, thereby improving the composition. Nevertheless, it's a superb and impressive sunrise-picture.

Data: March 15, 1925; 6.30 A.M. (Dawn); made from boat during a rough sea; 5 x 7 Graflex; 8½-inch Tessar; 1/50 second; Agfa film-pack (5 x 7); pyro; enlarged on Artura Black; made at Bermuda.

He is Still With Us

THE October meeting opened auspiciously. During the course of the evening I was asked if I could recall an unusual pictorial print I had seen on my visit to England, last summer. I replied, "Yes; one. That was at the Liverpool show. It was a noble marine in the form of a vertical panel, showing a tug in the lower right corner and a sea-gull in the upper left. It was identical with a similar view by President Pillsbury, shown at the club a year or two ago and later published in PHOTO-ERA, except that it was reversed." Sensing a chance to be funny, the humorist remarked, "I see—the tug in the upper left corner and the bird in the lower right!" The laughter that greeted this masterpiece of repartee shook the building, and its perpetrator is still wondering. I hope that he will recover from the shock.

Our Contributing Critics

(Continued from page 283)

is one concerning the steeple. Being white in color, it is partly lost in the clouds, which happen to be of the same color. The only way this could have been remedied is to photograph against a clear sky, which would be darker in tone. However, it is doubtful if that would improve the picture as a whole. Should we have such a change, part of the beauty of the print would be lost, for it is very evident that the clouded sky serves as a delightful background to the whole scheme. Despite any criticism, Mr. Smith's "Steeple and Rooftop" remains a splendid composition.

ARTHUR L. MARBLE.

ON looking at "Steeple and Rooftop," I am struck by the utter lack of proportion of steeple and rooftop, there being one steeple with several rooftops, which conflicts with the title. My conception of a view with this title would be one made over any town from a fairly high building, showing several steeples with numerous rooftops and no immediate foreground. The grouping is very inartistic, but for the clouds which help to relieve the bold prominence of the house-side. This unsightly house-side mars the whole composition, causing the steeple to take second place and the roofs appear "cut off", a bad procedure for pictorial quality. No amount of trimming will improve this picture, which on the whole is a poor attempt at pictorial composition.

Should this be merely a record of a charming familiar view—unfortunately not conceived by the camera—from the maker's room-window, well, I have no criticism to offer, it probably being the best attempt under poor circumstances with little choice of a more suitable camera-position. One thing in favor of this picture is that it reeks of the atmosphere of noon on a midsummer's day in some small American town. Furthermore, the leaves and the clouds have an appeal of their own.

JAMES BELL.



ON THE GROUNDGLASS

WILFRED A. FRENCH



Our Careless Writers

I WONDER if that little joke, "Too much to expect", published on this page, in the January issue, fulfilled its mission as a hint to certain ill-equipped writers for this magazine. In any event, it is possible that it may fit a stray reader ambitious to appear in print, but who may lack the ability to express himself correctly. It is astonishing to what extent the manuscript of some of these writers has to be corrected by the Editors, before it is published. The budding journalist generally writes in the same careless way in which he speaks; and as to his spelling—the less said, the better. Sometimes, the article submitted is so poor in expression, spelling and penmanship—although the subject-matter itself may be satisfactory—that the publisher is obliged to return it with the request that it be rewritten and made acceptable. A certain allowance is made, of course, when unpretentious writers commit such a general error as using "data" with a singular verb. Correct examples are, "Data are enclosed", "These data are correct", etc. Strata, memoranda, phenomena, candelabra are treated similarly. Each of these words takes a plural verb, because it is already in the plural. To speak of a strata, a memoranda, a phenomena, or a candelabra—as many well-meaning persons do—is absurd. In speaking of only one, say "a memorandum, phenomenon, candelabrum".

Then, too, the untrained writer misuses "badly" and "worst" in the same way as do most newspapers, although the latter excuse this bad habit on the ground of haste or brevity. (Exemplary English will always be found on the well-written and highly instructive editorial page, and elsewhere, of *The New York Times*.) A picture is not *badly*, but *greatly* or *excessively* overexposed. "My camera was *badly* damaged by the fall" is poor English. Say, rather, *severely*, or *considerably*. For the photographer to take, hurriedly, a quantity of soda or alum, instead of hypo, in preparing a fixing-bath, is not a *bad*, but a *serious* mistake—probably the *greatest* he ever made in the darkroom, although it was the *worst thing* he could have done in the circumstances. Blunder, error, fault already belong to the infelicitous class and, therefore, require no qualifying adjective of a similar character. "He wanted a Graflex the *worst way*" (to a painful degree) is unmitigated slang. He wanted the camera very much or he longed to own one, is dignified and expressive.

A house is beautifully situated, not *located*, in the landscape; and one admires its situation, not its *location*. The photographer was about—not *started*—to release the shutter. "He began—not *started*—to make pictures only recently", is good English. *To start* is a sport-phrase and is not synonymous with to begin. "The meeting *starts* at eight o'clock"; "begins" or "opens" is preferable. *Job*—instead of task, work, duty or position—is now in general use, and is seen even on the editorial page of the average newspaper. It is avoided by really good writers.

The select and dignified art-term, "replica"—having but one definition, *viz.*, a duplicate executed by the

artist himself and regarded, equally with the first, as an original—has not escaped the unsparing hand of the imitative writer. Its misuse has become so general, indeed, that a duplicate or repetition of almost anything—even a kiss—is called a replica, thereby changing the correct meaning of the word. As regards a duplicate of a multiple-gum print or a bromoil—made, of course, by the artist who created the original—I should not hesitate to pronounce it a replica. However, I do not think that the term can be applied justly to a contact-print or even a bromide enlargement, unless exact duplicates can be made only by the photographer who made the first one. Nevertheless, I should like to see the word "replica"—used legitimately—take its place in photographic terminology.

But to resume my plea for better English. I cannot understand why persons who pretend to be educated should deliberately use such common expressions as everybody, a person, nobody and somebody with a plural verb, plural pronoun and plural possessive adjective, when they plainly call for the singular in each instance! I have been obliged to change—oh, so many times!—sentences similar to these: "Everybody likes to use *their* own formula"; "A person should use *their* own judgment"; "Nobody likes to depart from *their* own, tried methods"; "Somebody wanted me to try *their* new lens"; "Everybody likes to do it *themselves*"; "Nobody wants to be poisoned; *do they?*" For "their" and "themselves", "do they?", substitute "his", "himself", and "does he", and you will be both logical and correct.

The editing pen recoils at the sight of the incorrect and widely used expression, *those kind of people*. That kind of person does not seem to know that the demonstrative adjective *those* demands a plural noun, namely, *those kinds*. The correct way is to say, *people or persons of that sort or that kind* (use singular verb); or *such persons* or *such people* (use plural verb).

"Mecca" is a place of pilgrimage in far-off Arabia. The name cannot be fittingly applied to a popular pleasure-resort or a convention-city.

Many contributors begin an article in the first person singular (I), then lapse into the second person plural (you), concluding in the same person or resuming the first person singular, unless they prefer to drop into the third person plural (they), instead of continuing to the end in the same person in which they began—the first (singular or plural), the second plural or the third plural. "Neither of them *are* good" is a very common error and inexcusable, as the indefinite adjective "neither" always takes a singular verb. This is also true of "everybody", "somebody", "anybody" and "nobody".

A person who expects remuneration for his writings should be sure that they are free of errors—at least ordinary ones—and, if hand-written, that they are legible. Many of the data that accompany prints entered in our monthly competitions are written so carelessly that some of the items cannot be deciphered and, consequently, have to be omitted.



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



Helpful Formula to Find Angle of View

WE are very glad to give space to a helpful formula which our good friend, Mr. E. H. Washburn, has found to be very serviceable. We will let him give it in his own words:

"On page 156 of the September, 1925, issue in the article on 'Calculating Angle of View', I was much interested in the method employed, as I enjoy mathematical problems when they are within my limited capabilities. I have a little, simple formula for the same purpose as the one referred to, which I carry in the back of my head and use when occasion requires. I can't remember whence it came, or who wrote it; but know that it was from an authoritative source. If it had not been so, I feel sure I should not have used it for several years, as I have; usually finding it to check with the published tabulations of view-angles by prominent lens-manufacturers. It is so simple and easy to use that quite likely some other PHOTO-ERA readers may like to use it. It is as follows:

"Where P equals the known dimension of the plate—length, width or diagonal—which is to be used, and F equals the known focus of the lens whose view-angle is to be found, then A will be the required angle, by using the equation

$$\frac{315 \times P}{5 \times F, \text{ plus } P} = A$$

Thus, to furnish a concrete example: to find the angle-of-view of a 12-inch focus lens on the long dimension of an 8 x 10 plate or film, $315 \times 10 = 3150$; $5 \times 12 = 60$, plus $10 = 70$. Then $3150 \div 70 = 45$; the desired angle in degrees. Or, expressed as a simple equation: $\frac{3150}{70} = 45$. Could anything be simpler or easier to remember and apply?"

Self-cured Stain Prints

A CORRESPONDENT mentions what appears to him to be a remarkable phenomenon in the staining of development prints and the subsequent removal of the stain, says *The British Journal* editorially. He had made a batch of prints which, presumably from age or exhaustion of the developer, were every one of them more or less uniformly stained. Perceiving the stain, as soon as the prints were placed in the fixing-bath and examined in white light, our correspondent, considering them to be useless, at once removed them from the fixer and threw them into a waste-box, where they lay impregnated with the fixing-solution until the next day. It was then noticed, with considerable surprise, that in the interval the prints had cleared themselves; those which were wholly exposed to the air were without a sign of stain, and others, which were partly covered by prints lying upon them, showed a partial removal of the stain in these covered portions. The experience, though an infrequent one, is not entirely novel; if we remember rightly, we referred to precisely the same thing on its being brought to our notice by an experimenter in France a few years ago. This particular anti-stain effect must be attributed—at any rate we can imagine no other cause—to the

bleaching-action of hypo in conjunction with atmospheric air. Certainly hypo, when acting in conjunction with air, has quite a vigorous effect of this kind, as can easily be shown by a little experiment. If a negative or positive transparency of low density be taken straight from the fixing-bath and placed in a tank of water with part of the plate sticking up above the surface of the water, the portion which is thus exposed to the joint action of air and hypo will be perceptibly reduced in density in a few minutes. This reduction is at least closely analogous to the discharge of stain, and the same chemical action, whatever it is, no doubt accounts for both.

Photometry and Photography of the Recent Solar Eclipse

THE July issue of the *Transactions of the Illuminating Engineering Society* features a report in which are combined the results of determinations of natural light during the solar eclipse of January 24, 1925, as reported by thirteen expeditions organised throughout the band of totality in the United States and Canada. The report contains a wealth of data on this subject and is illustrated by charts and corona-photographs. Among several appendices is one regarding photographic experience for the benefit of future investigators. A few copies of this number of the *Transactions* are available and may be obtained at \$1.00 each from the Illuminating Engineering Society, 29 West 39th Street, New York City.

A Lens-Shade

A DEVICE that few amateurs and some professionals seem not to understand or appreciate is the lens-shade. The function of the lens-shade outdoors is to keep the direct and indirect light of the sun from the lens or from reflections that might fall into the field of the lens. Many lenses, especially in the very small cameras of today, have shallow mount rims in order to economise space. Of course, the direct rays of the sun shining on the lens will always ruin a picture. But often a multitude of small reflections, of which we are unconscious, will cast a sort of haze or blur over the picture and we are unable to account for the phenomenon—and blame the lens, or the paper, or the plate, or film or the camera. As a matter of fact, the fault is ours in not protecting the lens properly.

Lens-shades are not at all difficult to make. Have its diameter equal to that of your lens-mount, so that it will fit on conveniently and not fall off, preferably of some softish material that will not scar the lens-mount—say, cardboard or stiffish leather. How long should it be? Just long enough not to interfere with the angle of view of the lens. A very simple way would be to look through the ground-glass and see how much the lens, without the shade, would show on the plate. Then fit the lens-shade not to interfere with the amount previously shown. If you use a film-camera, borrow a piece of ground-glass and perform the same experiment. In practice the gain in clearness and subtlety is marvelous, especially in working in bright sunlight.

A. B. C.



THE AMATEUR KINEMATOGRAPHER

HERBERT C. MCKAY



THERE has been an encouraging answer to the request for pledges as issued in the September issue. Already there have been a number of amateurs who have answered this request; and I have no doubt that those already received are but a small percentage of those which will come later.

The first replies which were received were from:
Benditzsky, Leon, 629 Stratford Place, Chicago.
Cormier, F., 120 Orchard Street, Newark, N.J.
Dusenbery, H. Syril, 2111 Jackson Street, San Francisco, Calif.
Holmes, Frank, 230 Carlton Street, Winnipeg, Canada.
Kerst, Walter D., 130 Wegman Parkway, Jersey City, N.J.
Schultz, Harry G., 417 Third Avenue, Astoria, L.I., N.Y.
Thorpe, Clarence M., 3109 Second Boulevard, Detroit, Mich.
Van Valey, Dr. F. G., 38 East 61st Street, New York.
Zein, Geo. P., 1753 Washington Boulevard, Chicago.

There seems to be shown a universal spirit of helpfulness. In reply to the question as to the most practical help the individuals may offer, I can only reply at present, "Secure one new member!" If each of us secures one addition to our number and these in turn repeat the performance, we shall grow as rapidly as we can care for the added responsibilities. There is slight doubt in my mind that the A. A. K. is destined to become a live body of ardent enthusiasts.

The sub-standard camera is still regarded as a toy by a great number of people. I recently received a letter from one amateur who knew just what he wanted to do, and his plans were admirable. However, he had the idea that the small camera was not adequate for his purposes. As he did not expect to sell any film for theatrical exhibition, it was immediately evident that he needed the sub-standard camera. He specified that he wanted a standard-gauge camera, suited for studio-production at a reasonable price.

In this connection I will say that a discussion of this point will be found in "Popular Kinematography". The advantages all lie with the miniature camera. Cost, weight, and quality are all with the "baby" outfits.

The New York Institute of Photography has had a new camera designed expressly for the use of its students. This camera has many features usually found only in the most expensive cameras, and it has the earmarks of a professional instrument. It will be ready for delivery soon. It is to be hoped that the president of the school will authorize the public sale of these instruments, as they will be ideal for topical use. A more detailed description of this camera will be given next month.

Winter is rapidly drawing near. This means that many amateurs will turn toward indoor photography. I have just received word that Messrs. Bell & Howell have introduced an arc-light of true motion-picture

studio appearance, designed to make interior shots with the sub-standard camera? These lights operate from the usual home-lighting circuit and are supplied complete at sixty-five dollars each.

The extent to which the sub-standard cameras are being used and the variety of ways in which they are used is indeed amazing. These cameras have been successfully used in the Arctic, in the Sahara Desert, the South Sea Islands, as well as in the more familiar parts of Europe, Asia and America.

They are being used in sales-work, in the Florida land-boom, they are being used for aerial photography and for engineering reports. They give universal satisfaction and uniformly good results. One owner who states that he had never made a single photograph in his life purchased a camera and after exposing 4,500 feet of film in various parts of the world, he found that he had to lose but 150 feet from the total—about 3% loss. How many experienced amateurs do as well with their still-cameras. (These statements published by courtesy of Bell & Howell.)

Mr. Paul F. Johnson of Altadena, California, objects to the article which I presented in this department regarding panoramas. Mr. Johnson has used his camera extensively in making records of scenes encountered upon his travels. He is all in favor of the panorama, and from his point of view, there is much to be said in favor of the practice. I shall give Mr. Johnson's view first.

He likes close-ups of large objects, such as churches and large vessels. It is evident that if a large-scale picture is to be obtained the operator must resort to panning. Mr. Johnson uses a Filmo and by resting it against his forehead and turning slowly about he obtained panoramas which are easily viewed when presented upon the screen. He uses the panorama considerably and gets the results he wants.

First, kindly note that Mr. Johnson makes a tripod of himself, speaking figuratively. He obtains a firm support for the camera. Then he swings slowly. These two things obviate the most striking disadvantages of amateur panoramas. You will note that in my article I spoke of the poor results of the camera which is not supported by some rest which will prevent vibration and those due to the quick pan.

As to the virtues of the panorama per se. It is quite true that the panorama is essential to good kinematography. Every professional tripod is equipped for this work. However, and I state this as a matter of personal taste, it should not be used when any other method can be substituted. Mr. Johnson evidently thought that my idea was to shoot, cut, swing to overlap the first shot and shoot again. I can understand how this could be the interpretation of my words. However, let us consider a race. I should shoot into the oncoming runners, then swing 90° to 100° and shoot them running into the distance. This gives a complete break, with no mental scene matching. In shooting large edifices, I should shoot the entire building from a distance, then approaching it, I should

shoot the more prominent details, a door, a window or a portion of a cornice, and so forth.

Mr. Johnson has written in an intelligent manner which shows that he has studied his subject and has practiced it. I am very glad to receive these letters. Making this reply is not to try to discount Mr. Johnson's views, for they are well taken and sensible. My reason is that when any question is brought up for discussion, the course of the discussion may be of value to those who have similar problems to solve. It is immaterial which viewpoint you adopt, you will choose the one which suits you the best and I hope that each discussion will help in some small way to improve your own work.

I should very much like to receive even more letters similar to this one from Mr. Johnson. It reveals a deep interest in and a close study of cinematography. This is the spirit which will keep amateur cinematography moving forward.

Chapter Two

POPULAR KINEMATOGRAPHY

In spite of the beautiful instruments which have been produced to be used in connection with the small ribbon-films, there seems to be a widespread idea that these outfits are mere toys. This is a very mistaken idea. These instruments are capable of producing work equal to that turned out by our professional cinematographers. In fact, in the hands of the amateur these cameras will produce better results than the professional types.

When I obtained my first miniature camera, I wished to know its possibilities and limitations. Therefore, I turned the camera and a spool of film over to my wife and told her to expose the film. She is not a professional photographer by any means, and was familiar with the motion camera only by having seen me operate my professional instrument. Following the directions issued by the manufacturer, she filled the camera, and exposed the film. In that entire spool there was not one scene which was spoiled! My only advice to her was to follow implicitly the printed directions. I fully believe that if the amateur cinematographer will go slowly and be careful to follow the manufacturer's directions, he will obtain results which are 100% perfect as far as photographic quality is concerned. Of course, the question of art is another matter.

The professional camera, fully equipped for studio-work has: dissolving and adjustable shutter, single crank, reverse, visual focusing, a normal lens of two-inches focus, an aperture $\frac{3}{4}'' \times 1''$, outside iris and mask-box, and a hand crank. The amateur camera has a fixed shutter, no reverse, fixed focus or focusing by scale, a normal lens of one-inch focus, and an aperture approximately $0.30'' \times 0.40''$ against the standard of 0.75×1 . The lineal ratio is $1 : 2.5$. The ratio of area is $1 : 6.25$.

One great advantage in the small camera is a purely optical one. With the usual standard two-inch lens, working wide open at $F/3.5$, and focused at forty feet, everything from twenty feet to infinity will be sharply enough rendered for topical and home-use, but with the miniature camera, with the one-inch lens focused at ten feet, everything from five feet away to infinity will be in good focus. These distances will give a picture upon the screen in which the greatest amount of blurring at any point in a 30×40 -inch image will be less than $1/5$ of an inch in actual practice, and upon the usual rough surfaced screen, there will be no appreciable blurring whatever.

This means that the general depth and sharpness of the picture will be greater in the small film than in the large. Those of you who are familiar with optics will recognise the old axiom, "All other things being equal, the depth of focus varies inversely as the square of the focal length."

Another advantage in the case of the small camera is the fact that you have but one adjustment to make to compensate for light-conditions. In the professional camera you have three, namely: shutter-opening, crank-speed and diaphragm. As the values of these three factors vary in their inter-relation, the operator must keep a sliding-scale of values in mind. The small camera with no exposure-adjustment, aside from the diaphragm-opening, has made the problem of exposure so simple that anyone may readily master it. The exposure-values run from 1 to 85 relative value. This is ample range for any purpose usually encountered. There is no sliding-scale whatever. Merely a table of fixed values.

One of the most difficult things to learn in the practice of cinematography is the art of cranking. Some people never learn, yet, without it, cinematography is impossible. A non-uniform crank-movement not only produces a jerky movement upon the screen but it alternately overexposes and underexposes the film. The modern miniature cameras are almost invariably provided with motor-drives which ensure uniform film-movement.

So, entirely aside from questions of portability, small operating-expense and similar considerations, we find that the small camera produces better pictures than the professional camera under identical conditions; exposure is simply regulated in the small camera, and a uniform crank-motion is assured. The three bugbears of professional cinematography, critical focusing, judgment of correct exposure and uniform cranking are eliminated. It is a fact that it is far easier to obtain good results with the miniature motion camera than with any type of camera ever produced whether of the motion or still variety. For those who have had no experience in the production of motion-pictures, there is no excuse to begin with the standard instrument.

I recently received a letter from a beginner. He wanted a professional camera, standard-gauge, studio-model, yet inexpensive. The same ideal is sought by many cinematographers. This man wanted a camera for home-use. I pointed out to him the facts that the standard studio-camera, complete with tripod, would weigh upwards of fifty pounds or more, depending upon the make, that his fifteen-minute reels would cost him not less than \$110 each when complete, that his projector would cost from three hundred dollars upward and that, even then, he would be required to obtain an asbestos-booth for the projector. Consider this bulk of disadvantages! What advantage has the professional camera? The dissolving shutter! That will come in the miniature line soon.

I do not mean to attack the professional instrument. Far from it! The ship's captain has to have a perfect chronometer; but who would want to carry a ship's chronometer about when good, serviceable watches may be had? The professional camera is an absolute necessity to the professional cameraman. It is a beautiful instrument of precision, and there is no greater pleasure than the manipulation of a high-grade studio-camera; but it is the height of absurdity to expect to use such an instrument in home-cinematography!

We have seen that better results may be expected in the hands of the amateur, from the miniature

camera. Now let us carry our comparisons further. The standard film, including the cost of raw-stock, both negative and positive, laboratory and title-charges, will not be less than \$110 for a film of fifteen to sixteen minutes screen-length. The equivalent amount of miniature film costs \$24 ready to project. The professional camera may be operated to expose one frame at a time. The miniature camera may be operated in the same manner. The professional camera may be operated in reverse for trick and comedy effects. This is also true of any miniature camera, as will be explained later. The professional camera has the automatic dissolving-shutter; a similar effect may be obtained with most miniature cameras. The professional camera has outside iris and mask-box. These may be fitted to the small camera successfully. The professional camera requires elaborate accessories to adapt it to title-work, the miniature camera may be fitted for such work at a trifling cost. Standard film may be printed upon tinted stock, which gives beautiful effects provided the colors are well chosen. The small film may be projected in any color and the color changed at will. Double exposures may be made with the professional camera, with great ease. With a little trouble, double exposures may be made with the small camera.

In short, complete playlets may be made with the small cameras, without the loss of any desired effects. As dramatic production is the highest phase of motion-picture art, it is evident that the small camera will serve every purpose. Only when one desires to enter news or topical fields does the miniature camera fail; but as this work deals exclusively with amateur cinematography, such considerations have no place here.

As all cinematography must begin with the purchase of a camera, by all means purchase a miniature-gauge camera. Later, if you feel the urge to professional work, you will find the miniature training to be of the utmost value to you. But at the beginning buy a sub-standard camera.

Making Your Own Titles

TO BEGIN using one of the amateur motion-picture cameras, on the market today, doesn't require much experience, only careful operation in the hands of an amateur, especially in making lengthy shots of one scene. I have found that it is better to make single shots of each scene and avoid panning as much as possible; in that way you can avoid jerky motion in a projection.

In my first run of film, which was a one hundred-foot roll, I got better results than I ever did with a Kodak, especially in woodland, river, and lake-scenes. I averaged six feet to a scene; but I had one trouble of which I spoke before—I should have shot each scene separately and avoided panning which was rather too fast. Luckily, I did not do much of it, and what I did were practically river shots and I did not ruin the film.

One advantage I have found with a Bell & Howell Filmo, it is compact and easy to carry, and there are not many degrees in the aperture-openings to manipulate. I am sure I will have better results in my next roll, for I will be more careful in making shots.

Another thing I thought could not be done, and that is to make a close-up within two feet with the regular fixed-focus lens without the use of the focusing-mount and not crowding the frame.

Now to get down to the principal part of my article, which is "Making Titles". I am not trying to discourage anyone in buying the title-boards that are

sold today, because there are good ones sold for both amateur and professional use; but, as it is known, the new sixteen-millimeter film is developed and printed by the reversing-process. An amateur would want the clearest titles and subtitles that can be obtained.



St. John

Used With Each Sub-Title

The Eastman Kodak Company makes titles with black type on white board which is much clearer than a black background with white letters; although this does not apply to making a scene and then running the film back, then making the titles by using the scenes you previously made for a background. This can be done, but it is preferable to use a dark background such as scenic dense foliage, this will give more body and contrast to the titles.

In making black-and-white titles without any scene



St. John

Used at Beginning and End of Film

for the background it is best to set the title-board or card—if you make your own titles—under the shade of a tree where the light is more even and subdued, and is better than direct sunlight.

I prefer making my own titles; and, if anyone is adept with a brush, after a few hours' practice he can make neat letters with a sketch on the head-letter at the beginning of the subtitles. In that way neater titles can be made and they will look more artistic when projected on the screen than plain black-and-white letters.

I have also designed an individual emblem or trademark which identifies the films. This can be used according to personal tastes. I am using mine to individualise my films and as an ancestral mark, as it happens to be an ancestral coat-of-arms.

I hope that this article will be as helpful to other amateur kinematographers as it has been to me. Mr. Herbert McKay of Eustis, Florida, is forming a club of nation-wide amateur kinematographers which, I think, is going to be very helpful to amateurs in exchange of practical ideas, and later the exchange of films. It would be worth your while to get in touch with Mr. McKay and get full details of his proposition.

In the interest of Amateur Kinematographers.

August 1, 1925.

My Ideas Regarding a National Kinematographers Association

PERHAPS you folks have noticed that Mr. Herbert C. McKay has, since the beginning of the year, spoken of forming a nation-wide camera club for those interested in motion-pictures. To my way of thinking, it is a splendid idea. Not only for the amateurs, but also for the professionals. Perhaps you have not given much thought to the idea. Well, listen.

To bring about such an association means much work. It needs the co-operation of all interested. One or two men alone cannot do it. So, if you are interested in motion-picture photography, help. Don't leave it to the other fellow. Let's get together on this. Once established, an association would develop into a power, much as is the A. S. C. now.

My idea would be to mark off certain sections or even states, according to the membership; appoint a leader for each section; each section to bear the name of the association, and a number given to the section. Thus one would know by the number, where the section is. Each section would be independent, though under the jurisdiction of the home-club. For example, The So And So Association of Kinematographers, 58, would be the local club in Maine, and number 29 would be in Nevada and so forth. They would all be the same association, yet independent. I think this would have to be done, as this country is quite large, and I can't see how I could go to New York or elsewhere to attend meetings.

As long as Uncle Sam carries the mail, communication between local clubs would be easy. In fact, a small magazine could spring into being, recording the doing of the local outfits each month.

I think a membership fee would be necessary for obvious reasons. I also favor the idea of a button to be worn by members. This would be valuable to members who travel quite a bit. The interchange of films idea of Mr. McKay's is a good one. Film shot by one local would tour the country, "playing" each and every other local in turn. Through the medium of the screen, we would soon become acquainted with each other. In fact, meet each other face to face.

The qualifications to become a member are, to my way of thinking, few. All that is necessary is to be interested in motion-picture photography, own and use a camera, sub-standard or standard, uphold the laws of the club, and play fair. The general rules can apply to all locals, but I think minor matters must be settled by the local itself, as conditions vary throughout the country. For instance, one local might contain all amateurs, while another would be all professional membership. Conditions are bound to be different, not only in that matter, but countless others.

Each local should have its own officers, they in turn under the home local's officers, who would naturally be in command of the entire association all over the country. Whether to admit boys under twenty-one

and the "fair sex" is of course a matter for the locals to decide. Who can tell what such an organization might lead to?

The benefits are obvious. Pleasure, knowledge, friends and entertainment. But to attain all this, every one must do his part. We cannot afford to be "slackers", if we wish to make a success of it. Once begun, the association will, I think, be the only one of its kind—that means we are pioneers. And pioneering is the hardest kind of work. Let's all put our shoulder to the wheel and push! Let's go.

KARL A. BARLEBEN, JR.

Enlarging 16mm. Film to Standard Size

THERE has been some question in the mind of amateur kinematographers concerning the use of miniature film for news-purposes. The sixteen-millimeter camera is not an instrument which one would want to use in regular free-lance news-work. However, if any extraordinary film is obtained, it may be submitted to the news-companies; and, if of enough value to justify the trouble and expense, they can make use of it.

By the use of special projection-apparatus, large films may be reduced to sixteen-millimeter gauge and the small film may be enlarged to the standard gauge. Although, in theory, any enlargement entails a certain amount of loss of detail, in practice a good 16 mm. film will make a very passable standard film for theater use.

This enlargement is at present commercially available only at the Eastman laboratories. It is, therefore, evident that the news-value of the film must be great enough to warrant the special messengers being sent to Rochester and the payment of the laboratory-fees in addition to the original price.

It may thus be seen that it is not advisable for the amateur to purchase a sixteen-millimeter camera and expect to do routine work with it.

It's Coming

ALTHOUGH many amateur and professional photographers were inclined to doubt the success of amateur kinematography, it must be evident to the most skeptical that considerable progress is being made to provide good cameras and projectors for amateur use. To be sure, the cost is still a bit high for some; but the day is not far distant when the average amateur photographer will be able to afford a motion-picture camera and use it without too much of a drain on his pocketbook. Still-photography will never be supplanted entirely by the motion-picture; and those who may have fears in that respect should ease their minds at once. However, the motion-picture offers certain opportunities which will add greatly to the pleasure and interest of amateur photography. Then, too, a happy combination of the two is very desirable, even for the average amateur. Certain scenes or events lend themselves to motion; others are better recorded by still-photography. An intelligent use of both will add a new delight to picture-making.

We suggest that our readers keep in close touch with the new equipments that are now being offered; and, wherever possible, obtain a sound working-knowledge of amateur kinematography. This does not imply that the still-camera should be placed on the shelf; but rather that it should be used in happy combination with the motion-picture equipment.



THE STEREOPHOTOGRAPHER



How I Make Stereoscopic Photographs

THE following suggestions are for those who have little or no practical knowledge of stereoscopic work. The suggestions are given here in the hope that my readers will take up this intensely interesting branch of photography.

Stereographs, as they are called, are incomparably more lifelike, realistic and beautiful than single pictures of the same scene. The ordinary picture is made with a one-lens camera and one exposure. Stereoscopic pictures are made with a two lens or twin-lens camera, called a stereoscopic camera. The ordinary picture of a scene or object appears like looking at a scene or object with one eye. Stereoscopic pictures viewed through a stereoscope are like looking at a scene with both eyes, the first appears flat without relief or roundness. Stereoscopic pictures look lifelike, real and natural. It is this naturalness that makes the stereoscopic picture greatly superior to the ordinary one-lens picture.

When viewing a properly made stereograph through a stereoscope,—a simple, inexpensive optical instrument—one often spends several minutes, as the eyes wander from point to point, noting here and there interesting and attractive features of the picture; in fact, the naturalness of everything is very impressive and one feels that he is actually there, looking at the real scene. All parts of the picture stand out in bold relief, roundness and proper perspective.

There is nothing especially new in the way I make stereo-pictures. In reading the photographic magazines I find many workers using similar methods. Making stereoscopic photographs is not difficult—let no one be discouraged on that score; and rest assured that when once you have made and finished a dozen good stereographs you will have something worth looking at, and you will be eager to make more.

In making my stereo-negatives I use, very largely, an Eastman Stereo Kodak which takes roll film—the negatives are about $3\frac{1}{8}$ inches square. Make stereo-negatives about as you make ordinary single-lens negatives, only a little softer. Harsh, chalky negatives never make good stereographs. Stop lenses down fairly well to get good definition—don't underexpose. For all distant views, snow-capped mountains and so forth, use a color-screen. Make certain that the camera is level before making the exposure.

Just as good stereographs can be made with a single-lens camera as with a regular stereo-camera, only one is restricted to scenes or objects without motion.

First make one exposure, then move camera to one side a few inches and make the second exposure. The distance the camera is moved between exposures depends on the distance the camera is away from the object or scene. For close-ups move camera $\frac{1}{2}$ inch or more. For scenes, miles away, move camera several inches to several feet.

The Stereo Kodak is handy and light to carry, and does very well for general work. In photographing high waterfalls, crags and precipices, such as one finds in the Yosemite Valley, the lenses are none too short focus. In using this camera I cut apart and transpose

the negatives before printing—trim off about $\frac{3}{16}$ inch from the two outside edges, then cut apart and transpose. This brings the two trimmed edges together, then fasten securely with adhesive tape. Scrape away emulsion before applying tape. I use a printing-frame made in two parts, hinged together like a pair of slates. Place the pair of negatives on a piece of glass between each half of printing-frame, cut two openings in a piece of opaque paper, each opening about $2\frac{3}{4}$ inches wide and 3 inches high, leaving about $\frac{1}{8}$ -inch strip between openings; place this double mat over the pair of negatives, adjust mat to occupy proper position on negatives—see that the lower margins of each mat-opening are in a straight line, and make sure that lower margins of mat-openings intercept similar objects in each negative. Close printing-frame and fasten together securely, then place a $3\frac{1}{2}$ by 7-inch double-weight glossy paper on negatives, place back of frame in position and fasten springs. Expose and develop.

If you want any printed matter to appear at ends of cards, make two negatives the proper size of such lettering that you want to show, mount these negatives the right distance apart on a piece of glass, block out all except the lettering, place the negatives in a common printing-frame, lay the piece of paper you have exposed for the pictures on the negatives and expose again, then develop, fix, wash and dry in the ordinary way. Trim to $3\frac{3}{8}$ x $6\frac{1}{8}$ inches.

Transposing negatives before printing and using one piece of paper for the completed picture, saves much work. Pictures can be made cheaper, sold for less money, and the finished result is better in every way than the old way of mounting on cardboard.

The lettering at ends of card explains the general locality of views, such as Yosemite Valley, Lake Tahoe, Southern California scenes and so forth. The title of each view at lower margin I put on by means of a small printing-press which uses linotypes I get made at a printing-office.

To develop negatives use any good Pyro-formula, and for the prints use developer that comes recommended for the paper you use.

I use Azo double-weight, Grade F, No. 1-2-3 and 4 according to strength of negatives.

B. D. JACKSON.

Let Us Have More Like This

WE are very sure that our readers who are interested in stereophotography will agree that contributions such as the one by Mr. Jackson are of much practical value and interest. This department is just the place for enthusiastic stereophotographers to exchange ideas and co-operate with us to stimulate interest in this branch of photography. The editors cannot do it alone. We are glad to go to the expense of composition and engraving, if our friends will supply suitable material for this department. If our stereo-enthusiasts want this department to function, they should get behind it with material, suggestions and real co-operation. We can make this department worth having and let us be able to count on the stereophotographers during the winter-months.





LONDON LETTER

CARINE AND WILL CADBY



SUDDENLY—to be exact on September 1—we said good-bye to summer. The change in the weather was remarkable, just as though the clerk of the weather realised the meaning of months and turned on the winter cold and rain. Many cut their holiday short for this reason; and certainly London is filling up earlier than usual. Both the International Photographic Exhibition and the Salon opened well, and are showing good attendance which proves there are already plenty of photographically interested people in town.

We will consider the Salon first. The chief feature this year seems the remarkable number and variety of nudes. No one connected with the exhibition could tell us the exact number; so, on Mr. Mortimer's suggestion, we tried to count them. But interruptions caused by the meeting of old friends—one of the attractions of the Salon—and the discovery of a pocket of eight nudes in one small corner, caused us to abandon the task. "They are as thick as your blackberries" remarked a friend who had spent the week-end with us; but we found they were not quite so generously distributed over the rest of the gallery. It was just that particular bush in the corner that had borne so particularly well!

In the old photographic days nudes were more tentative, more shrouded in mystery and underexposure; we had almost said more bashful and ashamed. But now they are frank and outspoken, and there is little hesitancy in the expression of the subject. And, yet, somehow the human form has retained some of its elusiveness; and there was an open air, dryadic charm about some of the exhibits that certainly justified all the attempts to portray this most difficult branch of our craft. There were two studies: "Nymph" by Bertram Park, and "The Fairy Ring" by J. Walter Collinge that were altogether successful in their spontaneity and spirit, and to which we returned for refreshment when a little disillusioned by some of the other efforts in the same direction. The unfortunate thing about nude-photography is that unless the effect is successful, it is apt to be a little ridiculous. One of the nudes simply sparkled with highlights; and in a far off way did suggest something of a porcelain-figure. But alas, for the realism of the camera, we could not keep our thoughts off the vast quantity of grease that must have been used, and marveled at the patience of the model. One must acknowledge, however, that taking an average, this class of photography has reached a higher level this year. The treatment is more spontaneous and it seemed to us more pictorial.

One of the most interesting features of the show was the exhibit of Herr Schieberth. His multiple-gum studies have certainly strayed rather far from pure photography; but they are none the worse for that when he can get such original and decorative effects. Two of them have been named—by the Salon Judging Committee since he had omitted to put a title!—"The Liar" and "The Mischief-maker", most aptly too; for so cynical and world-wise are the models. Herr Schieberth has been visiting London, fulfilling a promise given to Mr. Speaight when they met in

Austria, that he would give a demonstration of his methods to the Professional Photographers' Association. This was arranged last week at Messrs. Elliott and Fry's studio, and very sorry we were not to be in town at the time. This interchange of visits seems to us a most valuable thing, not only from the photographic point of view. We hope our master photographers will find their way to Germany and encourage German work to be shown over here, to which subject we shall have to refer again later in these notes.

This year's Salon is sure to please everyone. All the old favorites are there and quite up to standard; as Johnnie Walker would say "running strong". Mr. Mortimer has three of his striking sea-pictures—we have never yet heard the secret of how he gets them. Mr. Keighley shows some of his much-admired landscapes. Hugh Cecil has some jazz-figures. There are McKissack, Lambert, Marcus Adams, Bertram Cox, Ward Muir, Fleckenstein, Misonne, and we find plenty of new names, mostly not of British origin. Good, straight photography rejoices the heart of the purist, and experiments in gum and color interest the progressive; in fact, to quote an enthusiastic school-boy-photographer, it is "the best bob's worth in London!"

We next come to the International Exhibition of Professional Photographers organised by the Professional Photographers' Association which is housed at Princes—one of the finest galleries in London. The occasion of the Centenary of Photography (1825-1925) has been cleverly seized, and while vivid light is thrown on the growth of photography during its hundred years of existence, a still more illuminating ray is cast on the development of professional photography, which has certainly made great strides of late. Time was when, barring a few outstanding names, professional portraiture was looked down on by the general run of the educated public, and first-class work had to be sought abroad, in Germany, Austria or France. But now, largely owing to the influx of amateurs with ideas and training, all this is changed, and the best professional portraits reach a very high level.

Besides the British shows—there are really several—exhibits come from the United States, Spain, Germany, Holland, Austria, Sweden, India and Ceylon, Canada, Italy and France. It is at first sight a bewildering show, for there are nearly 450 exhibits in the Pictorial Exhibition proper, to which must be added the Professional Exhibits, which are one-man shows by the leading English professionals, with a total of over two hundred pictures. Then again there is the Historical Section, another two hundred odd, which include some early types of apparatus. Another interesting exhibit is that of photo-sculpture by the Cameograph Company. It is most enlightening as it illustrates the whole process. Photographs of the particular sort that have to be made before the sculpture can be made are shown. Lines are projected on the sitter's face, and these lines control the carving-machine. An unfinished carving in plaster untouched by hand, hangs alongside, demonstrating very clearly the accuracy of the cutting-machine. To crown all,

a finished reproduction in Wedgwood ware of the Prince of Wales—in profile—is shown that undoubtedly has retained much character and likeness.

We have stated that there are pictures from Germany; but it is a melancholy fact that the three shown—all by the same hand—are of the most ordinary professional type. We know for a fact that there is splendid professional portraiture being done there; and it seems a great loss that it should not be seen at this international show. The war did harm enough to the whole world without wilfully perpetuating its evils, even in so harmless a pursuit as photography. We know not who is to blame; but certainly someone has blundered in not seizing on this opportunity, in a small way, to help to heal old sores; for there are at the present time very few signs in the English public of antipathy to our enemies of seven years ago.

But taken as a whole, this exhibition is most interesting. With comparatively small effort we can see what is being done professionally all the world over, with the one melancholy exception mentioned. Of necessity, considering the diversity of subjects it is somewhat unwieldy and disconnected, but to the country cousin professional must be a mine of information and profit.

The Royal Photographic Society has just opened its autumn show; but three exhibitions in one letter would be too much for our long-suffering readers, and we hope to review it in our next.

A Japanese Photo-Annual

It would be superfluous at this time to acquaint our readers with the high artistic level of pictorial photography in Japan. Indeed, this supremely artistic people with its native love of natural beauty, its imagination, sincerity and quaint method of expression, has greatly influenced European and American art, including, to a certain degree, American pictorial photography. A number of years ago, PHOTO-ERA reviewed a collection of pictorial photographs by native Japanese, and did not hesitate to declare them superior, in every way, to the work of American pictorialists. At that time, there seemed to be no appreciable influence, of any kind, by the American school of expression. It is of peculiar interest, therefore, to study present-day photo-pictorialism in Japan, as shown in the *Japan Photographic Annual*, 1924-1925, a copy of which has come to my desk, through the courtesy of K. Narusawa, editor of this publication, who, until 1912, was a resident of Tacoma, Washington, and, for a number of years, a valued pictorial contributor to PHOTO-ERA. His photographic knowledge and experience are amply shown in the current (first) issue of his *Japanese Annual*, with its *circa* one hundred halftones illustrating the work of the foremost Japanese pictorialists. The volume (brochure) measures 7½ x 10 inches, and is modeled after the *English Photogram*, and its equal in arrangement, typography and quality of reproductions. The text, also of important interest, not only in Japanese but in excellent English—a credit to the Editor and the other writers, an evidence that the English language has taken a firm hold in Japan—consists of "Preface", by the editor; "The Present State of Photography in Japan"; "History of Pictorial Photography in Japan"; "Photography in Nagoya", and "Naniwa Shashin Club". It is sincerely hoped that pictorial workers will be sufficiently interested to order copies of this work, which is published at 2.50 yen (or \$1.50 postpaid) the copy, by the Asahi Shimbun Pub. Co., Ltd., Tokyo and Osaka, Japan.

WILFRED A. FRENCH.



COMING EXHIBITIONS



NOVEMBER 1, 1925. New Zealand Photographic Salon, Dunedin, under the auspices of the Arts Committee of the New Zealand and South Seas International Exhibition, 1925-26. The Salon will be housed in a specially equipped building. Last day for receiving prints, October 15, 1925. Entry-forms may be obtained from the High Commissioner for New Zealand, 413-5 Strand, London W.C. 2, England, or from H. M. British Trade Commissioner, 285 Beaver Hall Hill, Montreal, Canada. We have a few entry-forms which we shall be glad to send to any of our readers.

DECEMBER 1, 1925. Maryland State-Wide Photographic Competition under the auspices of The Photographic Club of Baltimore City, 105 West Franklin Street, Baltimore, Md. Last day for receiving prints December 1, 1925. This competition is open to any amateur who resides in the state of Maryland, and all members of the Photographic Club of Baltimore. Further particulars may be obtained from The Print Director of the club.

DECEMBER 1 to 31, 1925. Fourth Exhibit of Pictorial Photography, The Southwest Museum and the Southern California Camera Club, Los Angeles, Calif. Last day for receiving entries, November 21, 1925. No entry-fee. Mail prints to Fred R. Dapp- rich, Chairman Print-Committee Southwest Museum, Los Angeles, Calif.

DECEMBER 19, 1925 to JANUARY 10, 1926, inclusive. First Italian Salon of International Photography, Turin, Italy, under the auspices of the Gruppo Piemontesse per La Fotografica Artistica and of the Societa Fotografica Subalpino at the Galleria Centrale d'Arte, via Pon. 4, Turin. Last day for receiving prints is November 15, 1925.

JANUARY 4 to 31, 1926. Ninth International Salon of Photography will be held under the auspices of the Camera Pictorialists of Los Angeles, at the Los Angeles Museum; entry-forms will be mailed, or may be had by writing to N. P. Moerdyke, Secretary of the Camera Pictorialists of Los Angeles, 811 Washington Building, Los Angeles, Cal. Last day for receiving prints December 17, 1925.

JANUARY 16 to 31, 1926. Seventh Annual Salon of Photography will be held in the Albright Art Gallery, Buffalo, N.Y., under the auspices of the Buffalo Camera Club. Last day for receiving prints December 28, 1925. Lester F. Davis, secretary, 463 Elmwood Avenue, Buffalo, N.Y.

MARCH 13 to APRIL 18, 1926. The Annual Pittsburgh Salon of Photographic Art will be held at the Art Galleries of the Carnegie Institute under the auspices of the Photographic Section of the Academy of Science and Art. Last day for receiving prints, Saturday, February 13, 1926. Address all communications to P. F. Squier, secretary, 237 Avenue B, Westinghouse Plan, East Pittsburgh, Pa.

Our Congratulations

ANOTHER last moment item is to record the welcome arrival of Muriel Bruning in the home of Mr. and Mrs. Walter P. Bruning of Cleveland, Ohio. Mr. Bruning's beautiful child-studies are too well known to our readers to need comment. He will now have a new and lively subject. We are sure that he will do it full justice with his camera.



HERE, THERE AND EVERYWHERE

To ensure publication, announcements and reports should be sent in not later than the 5th of the preceding month.



Dr. Kilmer's Photographic Activities

HAVING been the first to recognise, in the photographic press, Dr. T. W. Kilmer's brilliant gifts as a portrait-photographer, when, in the June number, 1916, I published his strong and sympathetic likeness of his close personal friend, Dr. E. L'H. McGinnis—which had won the first prize in our Home-Portrait competition—I cannot resist the desire to add a few lines to his description of his working-methods, printed in this issue which he has consented to write at the Editor's request. The following month, he captured the first prize in "Subjects for PHOTO-ERA Cover" competition with a superb head of an elderly gentleman in flowing beard, à la Rubens. Needless to say, this wonderful piece of work created a sensation, and stamped Dr. Kilmer, although an amateur worker, as one of the foremost portraitists in this country. At the annual banquets of the Professional Photographers of New York, he is always an honored guest, and his high rank as a portrait-artist was long since firmly established, though he photographs none but his personal friends, and members of his family, and always purely in the capacity of an amateur.

Among the portraits which followed those mentioned above, and published in PHOTO-ERA, are "Young Buck Indian" (first prize) November, 1917; "Dr. H." (first prize) July, 1917; "Young America" (his son) December, 1918; "An Old Movie Actor" (first prize), May, 1922; "Head of a Hindu" (contributed), February, 1923; "Having a Ride" (first prize, Indoor-Genres), March, 1923; "Pirie MacDonald" (contributed), August, 1923; "The Pilot" (first prize), April, 1924. As a diversion, the doctor participated in the May, 1924, Miscellaneous competition and, through his "An Old Long Island Farm House", won first prize.

Long before he rose to distinction as a portraitist, however, Dr. Kilmer practised his favorite hobby as an outdoor worker, achieving success in manifold ways. A partial list of his happy results is contained in the following very reluctant reply to my request for this and other information, which reached him at his country-home, outside of New York City.

"A list of my photographic honors is requested! I am blessed if I know how to comply, I never wrote them down, and cannot remember many of them during the past quarter of a century of a busy life practising my chosen profession of medicine.

"I have been honored with prizes of various kinds in almost every photo-magazine in this country and abroad. My camera-activity includes numerous illustrated articles published in magazines and newspapers; illustrated baseball-articles; photographs of the New York Police and Fire Departments; photo-records of troops in the field while surgeon (eight years) to 102 Engineers N. G., N.Y.; numerous articles and photographs in *American Annual of Photography*.

"Silver medal International Exposition of Photographic Arts, Grand Central Palace, N. Y. City, 1915; First Prize (\$300) Eastman Kodak Co., 1909, also many prints for same purchased since; prizes from Toronto Camera Club, Montreal Camera Club, Wanamaker, Philadelphia, and Frederick & Nelson,

Seattle; Grand Prize, New England Photographers' Exhibition; Purse of Gold, Mid-Atlantic States Professional Photographer's Association; Bronze Plaque from King of Hungary, for exhibit at Budapest.

"Exhibits hung in Salons of Los Angeles, Buffalo, Washington, D.C., Chicago, Pittsburgh, San Francisco, Oakland, Portland (Me.), Philadelphia, London, Scotland, Australia, Budapest.

"One-man shows in Chicago, Pittsburgh, Cleveland, Portland, New York, Philadelphia, Baltimore, and other cities in the U. S. Also Permanent Exhibit of Portraits of Men in Old National Museum, Washington, D.C.

"Member of Camera Club, New York, Pictorial Photographers of America, and Pittsburgh Salon. Addresses on Lighting in Portraiture before Professional Clubs and Societies.

"For me to state, off-hand, and from memory—and by return-mail, at that—all you ask of me, is quite a task. Incidentally, when many professional photographers of New York and other cities come to 'poor, little me', asking, 'How do you do it?',—when to my mind they all are so far ahead of me in any thing that I have to offer, they make me blush! Sometimes, I wish that I had never seen a camera; but I know that I have derived a great deal of fun and recreation from my hobby, and when I get so old that the heart-sounds through my stethoscope become inaudible, and when the tactile corpuscles of my right digits become so impaired with years, that I fail to feel the human pulse, then know I that my camera, lens and films are still able to keep my brain young, and keep me from senility and senile dementia! I take my hat off to photography—the greatest hobby of them all!"

Readers and others who may not be familiar with Dr. Kilmer's work will find it profitable to study the examples of his portrait-activity to be found in back-numbers of this magazine. Personally, and frankly, I have long admired the doctor as an artist, a medical practitioner, and a man.

WILFRED A. FRENCH.

Dallas Camera Club Doings

It is always interesting and helpful to receive camera-club news, especially when it is the kind our good friend E. H. Brown sends in from time to time. We like all the human-interest details. After all why should we be so terribly formal when a smile and a good handshake does so much more to make life worth living?

Mr. Brown says that the new officers of the Dallas Camera Club, Dallas, Tex., are: president, H. M. Sutton; vice-president, B. O. Baker; secretary, G. Jules Dullnig; directors, B. P. Willis and A. M. Belcher; editor of "Proofs", E. H. Brown. Then he goes on to give the following news:

"Our interchange set for the Associated Camera Clubs of America 1925-26 interchange was selected recently by R. Jerome Hill, a local Dallas artist, whose landscapes are favorably known throughout the country. Mr. Hill, at one time, was a professional photographer; and we felt that he was, therefore,

eminently well qualified to act as judge. The set consists of thirty pictures, selected from sixty-two pictures entered, and represents the work of eight of the leading members of the club. Ten or twelve of these pictures will be reproduced in one of our evening papers, *The Dallas Journal*, at the rate of one picture a day, together with suitable stories. More 'publicity stuff'. In addition, one of the pictures will be used as the cover-design of a forthcoming issue of 'Dallas', the official monthly publication of the Dallas Chamber of Commerce.

"On October 1 the club moved to new quarters, 2503 Commerce Street. I recall that when we moved to our present location, showing a '1/2' number, you stated that you received the impression that Dallas was greatly crowded. The '1/2' represents a second-floor location. We are at last on the ground floor, though not quite so centrally located. At the new location, we will have access to a darkroom for the purposes of demonstrations and so forth, although this equipment will not be for the general use of the members. Virtually all of our members do their work at home and we have never felt the need of darkrooms.

"On October 5 our Annual Exhibition was judged. In years past, we intended to hold such an exhibition; but owing to the newness of the club, we felt that it would be better to postpone it rather than exhibit work to the public which might not be of the highest photographic standard. This year, we believe, we have work which may be properly shown to the public. The final entry-date was October 5, but the actual exhibition will not be held until some time early in November. Incidentally, the *Dallas Times Herald* has offered the club \$50 in prizes in return for exclusive publication-rights to the pictures. We hope to have a very representative showing.

"At a meeting, recently, another professional photographer joined the club, making a total of six of the brethren now with us. It is very gratifying to know that our efforts to 'line up' the professionals are beginning to bear fruit. We have been at it for four years. It is our hope eventually to get all the professionals of Dallas on our side. There is nothing to be gained by working at cross purposes with the professionals, even though they may, and do, work at cross purposes with each other. Our attitude is that the camera club offers them a neutral meeting-ground and we believe that, in time, this stand will prove beneficial to the photographic fraternity in Dallas and the camera club as well."

Exhibition of Dr. Pardoe's Pictures

WE read with much pleasure the detailed account of Dr. Pardoe's exhibition of pictures, which was arranged by the Woman's Literary Club of Bound Brook, N.J. The item to which we refer appeared in *The Chronicle*, published in Bound Brook. It is said that "a prophet is without honor in his own country" or, in modern parlance, that a man usually remains unrecognised by his home-town, no matter how many honors are heaped upon him by the world at large. However, in the case of Bound Brook, N.J., we are glad that its townspeople have proved to be one of the exceptions to the rule, and that their distinguished townsman received well-merited public attention. Needless to say, the exhibition proved to be of great interest and value. The splendid example set by this woman's organisation might well be followed wherever a man or a woman merits home-town support and recognition.

What Say You—Amateurs and Professionals?

How many of our readers are really aware that they are paying a considerable sum for taxes on plates, films, cameras and lenses? The amateurs and professionals feel this tax. In some cases it has proved to be a positive check on growth and prosperity. It should be repealed at the next session of Congress. From careful inquiry we are led to believe that the removal of this tax will do more than any one thing to boom the entire photographic industry. In the end, the government will not be a great loser; for increased business will mean larger income taxes to be paid by manufacturers, dealers and professionals. When it comes right down to it, are not cameras, lenses, plates and films the working-tools of the professional photographers? What else could he use to earn his living?

From the point of view of the photo-finisher the removal of this tax would mean an increase in the number of films and plates to be developed and printed. The amateurs would then use more material and buy more cameras because of lower prices. In short, there is no doubt that the early removal of this tax would immediately strengthen the entire photographic market and stimulate activity in buying among beginners, amateurs and professionals.

It is the ultimate photographic consumer who pays; and it is up to him to speak out clearly and convincingly right now. It does no good to grumble. It requires intelligent, straightforward, concerted action to obtain anything that is right, politically or otherwise. Therefore, we urge our readers to write, telegraph or call upon any of the following named members of the Ways and Means Committee, House of Representatives, and Finance Committee, United States Senate. Tell them why the tax should be repealed and do it by giving them facts.

WAYS AND MEANS COMMITTEE, HOUSE OF REPRESENTATIVES

Republican

William R. Green
Willis C. Hawley
Allen T. Treadway
Isaac Bacharach
Lindley H. Hadley
Charles B. Timberlake
Henry W. Watson
Ogden L. Mills
Jas. C. McLaughlin
Chas. C. Kearns
Carl R. Chindblom
Frank Crowther
Harris J. Bixler
Charles L. Faust
Richard S. Aldrich

Democrat

John N. Garner
James W. Collier
William A. Oldfield
Charles R. Crisp
John F. Carew
Whitmill P. Martin
Henry T. Rainey
Cordell Hull
Clement C. Dickinson
Robert L. Doughton

FINANCE COMMITTEE, UNITED STATES SENATE

Republican

Reed Smoot
George P. McLean
Charles Curtis
James E. Watson
David A. Reed
Richard P. Ernst
Robt. N. Stanfield
Jas. W. Wadsworth, Jr.
William B. McKinley
Samuel M. Shortridge

Democrat

Furnifold M. Simmons
Andrieus A. Jones
Peter G. Gerry
Pat Harrison
William H. King
Thomas F. Bayard
Walter F. George

Minnesota State Fair Has Photographic Exhibition

WE were interested to learn that the Fifteenth Annual Minnesota State Fair, held at Hamline, Minn., included a photographic exhibition which aroused much favorable comment. A first prize of \$20 was won by John Curtis Thomson of St. Paul, and a second prize of \$15 by Ben R. Landis of Minneapolis. There were two hundred pictures hung. This example of encouraging photography at state fairs should be followed by other state fair officials. Camera clubs can do much in this direction, if they will make the effort. It should be our pleasure and our duty to encourage photographic exhibitions wherever they may be held to advantage.

Photograph Wins Radio Message from MacMillan

ONE of our subscribers and contributors to PHOTO-ERA MAGAZINE, Mr. Harold I. Orne of Melrose Highlands, Mass., happened to be at the Charlestown Navy Yard when Donald B. MacMillan, the Arctic explorer, sailed for the north, June 17, 1925. He made some photographs of the explorer and mailed the prints to Wiscasset, Me., in time to catch MacMillan just as he was sailing from that port. Much to Mr. Orne's surprise and pleasure he received the following radio-message. "Have had the time today to look at photos you so kindly sent me. Thanks very much. (Signed) MacMillan". All of which goes to prove that a little photographic skill, thoughtfulness and courtesy invariably win favorable attention and good will.

Union Camera Club

At the regular monthly meeting of the Union Camera Club of Boston, the prize for the best picture of the members' monthly print-competition was awarded to Mr. Ralph Osborne. His print, entitled "Under the Elevated", consisted of an animated perspective view of Atlantic Avenue, the Elevated overhead casting strong shadows on the street below, with more or less traffic as accessories. The entire exhibit, smaller than usual, contained ten prints—each of excellent pictorial quality.

W. A. F.

Will Rounds Wins Floral Prizes

OUR readers may not know that Will Rounds of Lowell, Mass., the autochrome expert, is a lover of flowers. He has a beautiful garden in which he grows choice varieties of irises, fancy dahlias and gladioli bulbs. Recently, he won the first prize at the Boston Dahlia Show, held at Horticultural Hall, Boston, Mass. His exhibit was one of pompom dahlias. Again, at the Essex County Fair, Topsfield, Mass., Mr. Rounds won a first prize award. Surely, no better combination could be devised than that an expert autochromist should love and grow the flowers which he photographs so beautifully in natural color.

Union Camera Club Photographic Course

THE photographic course to be conducted by Union Camera Club this year well deserves the name of "Practical Photography". Every step of the work of producing a finished product of high-grade will be taken up in detail.

This club for years has been a leader in photography, and an innovation to be introduced in this year's course ensures this leadership.

As early in the course as is practical, a daylight-outing will be held for the purpose of instruction in actual exposures. This expedition will consist of the making of negatives for later developing, printing, mounting, and criticism as part of the class work in camera club laboratory.

The course will be given under the personal direction of Mr. Edwin C. Howard, member of the Union Camera Club and sub-master of the Longfellow School, Roslindale, Massachusetts. Further particulars may be obtained from the Educational Department, The Union, 48 Boylston Street, Boston, Mass.

Fort Dearborn Camera Club, Chicago

THE Second Annual Exhibition of the Fort Dearborn Camera Club will be held on Friday evening, November 6, in its club-rooms at 136 West Lake Street, Chicago. An invitation is extended to everyone interested to attend. For the benefit of those who would like to view this exhibition, but are unable to attend on the night of the 6th, the prints will remain hung for two weeks following and can be viewed any evening during that time. The club has made considerable advancement both technically and pictorially since the first exhibition last year and an interesting collection of prints is promised.

GEORGE P. WRIGHT, *Secretary*.

A Quality Product of Practical Value

Now is the time of year when the vacation-pictures should be neatly mounted in albums and clearly titled. We have experimented with a number of white inks but always come back to the old reliable and uniform product known to the trade as Johnston's Snow White Ink, manufactured by J. W. Johnston, New Arts Building, Rochester, N.Y. We have used it for years and use it now in all our editorial and photographic work. It may be obtained from all progressive photo-supply dealers and art-stores. It is a quality product that merits a large and increasing demand.

Recently Johnston's Snow White Film-Holders have made their appearance and are very cleverly made to protect and to keep film-negatives from being scratched or damaged. Moreover, each negative-pocket is so arranged that the negative may be quickly and easily found. These two Johnston products are well worth the immediate attention of our readers.

Department of Photography, Brooklyn Institute

THE fall and winter activities of the Department of Photography of The Brooklyn Institute began with the first meeting of Miss Sophie L. Lauffer's class in Pictorial Photography on October 1.

The private view of the photographs of Mr. Harry E. Neuman, fifty in number, was on Monday, October 5, to continue until November 2.

Noticeable is No. 10, a gum print, "Ballet Dancer". A very soft effect in blue black printing, dancer posed against a velvet curtain, with a small patch of light in the background.

No. 11, "Doris", a girl reading, a sepia gum with the quality of a crayon drawing.

No. 19, "Evening", an old house, the lighted

windows showing, giving an excellent evening effect. Good composition.

No. 20. A bromide print of Mr. Wm. Morris Greenberg. Bold, strong, contrasty.

No. 1, "The Scimitar", a crouching dancing female, with a drawn scimitar, somewhat mixed in composition, somehow interesting.

No. 4, "Edna", very excellent kallotype quality of print. Portrait of a young girl.

No. 8, "Irene", a portrait of a young girl, seen in numerous exhibitions, possessing a peculiar charm, and luminous quality in lighting.

Mr. William H. Zerbe's classes (2) are from October 6 to April 20, with ten demonstrations, practically covering the photographic field.

MYERS R. JONES, *Chairman Press Committee.*

The Camera Club, New York

THE Camera Club, New York, has been invited by the Council of The Royal Photographic Society of Great Britain to give an exhibition in its Society House on Russell Square, London, of the work of The Camera Club's members. Those members desiring to contribute to this collection should send in their prints not later than November 15, 1925; and they must be on white or cream-colored mounts not larger than 16 x 20 or smaller than 12 x 16.

Milwaukee Camera Club

THE regular meetings of the Milwaukee Camera Club began on October 7 at the Milwaukee Art Institute instead of at the Journal Building as heretofore. This year meetings will be held on Wednesday instead of on Tuesday evenings. Owing to the courtesy extended to the club by the Milwaukee Art Institute, there should be renewed enthusiasm and improved work during the coming year. These organisations have much in common and we wish both growth and prosperity.

The Tale of the Red Cross as Told in Pictures

THERE are forty thousand photographs in the files of the graphic section of National Headquarters of the American Red Cross. These tell the tale of the services to humanity of the greatest welfare organisation in the United States. The Red Cross has probably the most extensive "morgue" of any society of its kind in the world. Especially does it specialise in action-pictures.

When disaster strikes, the Red Cross is ever ready to extend its service to the sufferers from fire, flood, pestilence, tornado or earthquake. It has nurses, doctors, X-ray machines, special trains, even airplanes on the scene. It works ceaselessly, tirelessly, through the long hours of day and night that the work of mercy may go on. But the Red Cross is ready also to tell to the world, through its graphic section, the story of the tragedy in photographs.

Action-pictures are a specialty with Red Cross cameramen. When Mrs. Dorothy Davis Sleichter, Red Cross public health service nurse and the first member of her profession to fly to a point of duty, made her spectacular flight during the summer from Fairbanks in Central Alaska to Fort Yukon on the Arctic Circle, where an epidemic of influenza was raging, she was photographed, ready for the journey which the extreme cold helped to make a perilous one.

Again when the Red Cross made an airplane-ship-

ment of antitoxin from Indianapolis to Murphysboro and Carbondale, just after the great Mid-west tornado last spring, action-pictures were made. This was the first time in history that an airplane had been used in the work of disaster relief. Once more when the ill-fated "Shenandoah" crashed, the work of the American Red Cross, immediately on the job, was graphically told in pictures.

The Red Cross annual Roll-Call for memberships always brings into use interesting views of the work being done. The overseas Roll-Call, held on the ships of the American Merchant Marine and of the United States Navy in every corner of the globe furnishes vivid accounts of how seamen respond to the plea. Last year the crew of the ill-fated "Shenandoah" was photographed with its one hundred per cent. membership banner. As usual, there were action-pictures on the presidential yacht, the Mayflower. In the various patriotic parades held in Washington, groups of uniformed American Red Cross nurses are always shown. In athletics, the American Red Cross Life-Saving Corps releases some of the best of the action-photographs. The sadder side of the picture is told in the government-hospitals, where disabled veterans of the World War are being served in many ways by the Red Cross.

Even down to the animal kingdom the photographic work of the Red Cross extends. There is a certain little poodle-dog who, for many years has dashed around National Headquarters at Washington, during the Roll-Call period, bearing a placard which asks for memberships.

The war-dog, too, has been immortalised by Pope's painting in the Red Cross museum. The horse plays a part in the general scheme of things. A progressive chapter recently sent in a picture of a horse being given Red Cross first-aid treatment.

And so the story goes. In disaster relief-work, in the services to veterans and to the men of the nation's armed forces and their families, in First Aid and Life-Saving, in Nutrition, in Home-Hygiene and Care of the Sick, in Public-Health Nursing, in the activities of the volunteers and in the American Junior Red Cross, pictures tell the tale of the Red Cross ideal—service to humanity.

The Roll-Call this year will be held as usual from Armistice Day to Thanksgiving. The dates are from the eleventh to the twenty-sixth of November, 1925.

The Picture Market

Oakley Photo-News, Geneva, N.Y., inform us that they are in the market to purchase up-to-the-minute news photographs from all parts of the country. Photographs of fires, wrecks, floods, tornados, accidents and similar subjects are wanted. Any size will be considered. Payment made according to news-interest. Each photograph must be captioned with proper data which tells the time, place, cause and other circumstances. All prints will be acknowledged promptly.

B. F. Langland

JUST as we closed our forms for the November issue we learned with deep regret that B. F. Langland of Milwaukee passed away on September 25. He and his work have long been familiar to readers of PHOTO-ERA MAGAZINE. Some of his best pictures were marines. He was a member of the Milwaukee Camera Club. Our deepest sympathy is extended to relatives and friends.



THE PUBLISHER'S CORNER



What are You Doing for Christmas-presents?

OF course, I am going to suggest that my readers consider seriously the matter of giving a subscription to PHOTO-ERA MAGAZINE. Already, we have received several such orders to begin with the January, 1926, issue. Others request us to renew their friend's subscription for the coming year. Then, too, our combination-offers, which include several photographic magazines, are proving to be popular for Christmas-presents. Without a doubt, there are two or three of your friends who are sufficiently interested in photography to appreciate the gift of a subscription. Let us have your order now, and you will not have to think of something else to give.

Sometimes I think that our readers have an idea that our announcements with regard to good books on photography are placed in the magazine just to fill up space. There are two reasons: one, is to render a service by recommending books which we believe will be of real help to our subscribers; the other, is to sell these books at a reasonable profit. It so happens that there are now several books which will make very acceptable Christmas-gifts. It matters not whether the prospective recipient is a beginner, advanced amateur or professional—there is a good book on photography which you can give him and for which he will thank you. If you are in doubt with regard to any book being suitable for a particular person, just write us frankly about it, tell us something about the work and plans of the person for whom the book is intended and we shall be very glad to help you make the selection.

During the year, many subscribers have obtained the special Big Ben Binder which holds twelve copies of PHOTO-ERA MAGAZINE and has proved to be a very serviceable and practical method to keep files of the magazine in good order. It is neat in appearance, has the name of the magazine stamped in gold on the back and on the cover and is an addition to any library-table. This is a particularly welcome gift and inexpensive, too. We have these binders in stock now for immediate delivery.

Which Miscellaneous Competition?

By referring to the Advanced and the Beginners' Departments, it will be noted that some months "Miscellaneous" is the subject for both Competitions. During the year we have had considerable difficulty, at times, to know definitely for which competition a print was intended. To write "Miscellaneous Competition, Ending June 30" on the back of the print is not enough. Let me suggest, for the benefit of all concerned, that each print should be clearly designated for either the *Advanced* Miscellaneous Competition or the *Beginners'* Miscellaneous Competition. Attention to this detail will be a great help to us in taking proper care of the pictures as they are sent in by our friends.

Is This so in Your Town?

FOR several months I have been keeping a record of letters from readers who say that they are unable

to obtain PHOTO-ERA MAGAZINE from newsdealers or photo-dealers in their own towns. The fact is that many of these readers have become regular subscribers and thus made sure of receiving the magazine regularly. However, for the convenience of those who prefer to buy the magazine from a news stand or dealer, copies ought to be available. There is just one way to ensure a supply of PHOTO-ERA MAGAZINES and that is to ask for them, place an order for them and insist that they be obtained for you regularly. If there is a demand created by you and other readers, there will soon be plenty of copies available. No news or photographic dealer will refuse to meet the requirements of consistent demand! It is of interest that in a number of towns and cities where PHOTO-ERA MAGAZINE was not obtainable a few months ago, it is now on regular sale. This change was brought about by readers who insisted that the magazine be ordered for them. I might add that no form of publicity or sales-promotion will be more sincerely appreciated than a kindly word for PHOTO-ERA MAGAZINE spoken to your local news-agent or photo-dealer. It will help us all—thank you.

What Do You Think of This?

THE suggestion was made recently that photographic magazines might well dispense with competitions for beginners and amateurs. It was asserted that such competitions had served their usefulness and that the salons and exhibitions throughout the country were of greater practical value than those conducted by the magazines. Well, is this so? No matter what attitude the reader may take on the subject, I am very sure that an expression of opinion would be appreciated. Frankly, the competitions which are conducted by photographic magazines are not a source of revenue. They are an expense which is charged to advertising; and each magazine considers that it is rendering a real service to encourage these competitions and help the contestants by pictorial criticism of their pictures. In short, the photographic magazines thought that they were doing something worth while and something that was of practical value and interest to their readers. Now, the assertion is made that this sort of thing has served its purpose and that competitions conducted by photographic magazines should be dropped in the future. A prompt and frank expression of opinion from my readers will serve to prove or disprove the assertion. It will also be of general interest.

The Military Photographer out this Month

IN order to make room for the article on aerial photography in this issue, we have omitted the department "The Military Photographer". In the December issue there will be a number of interesting items. Recent correspondence with officials in Washington, D.C., will furnish material for several notes which will be of value to all those who know the important part that is played by photography in the scheme of National Defense.



A WINTER-SUNSET

A. L. TRACY

HONORABLE MENTION—REAL SUNRISE AND SUNSET PICTURES



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No. 6

Winter-Photography in the Selkirks

NEWTON WILLIAM EMMENS



N looking over some old photographic magazines recently, I noted the suggestion in an April issue, that now that spring was at hand it was time to take down the camera from the shelf on which it had been hibernating all winter, give it a thorough dusting and cleaning and put it in condition to make its annual crop of photographs. I was going to say "pictures", but unfortunately, out of the many thousands of exposures made annually, only a very small percentage can be classed as "pictures", the bulk being merely snapshots absolutely devoid of interest to anyone except the person who made them and any subjects that might be included therein.

But why put the camera away during the winter-months? Surely, there are as many opportunities to obtain pictures of snow-scenes that will give as much pleasure in the making, and to our friends in the viewing, as do our choicest "bits" photographed at other times of the year. Perhaps one of the troubles is that so many snow-photographs are too much on the order of the "soot-and-whitewash" variety, the contrasts being too great and there being an almost total lack of detail, not only in the snow itself, but in the darker objects in the picture. This can be avoided by the use of a suitable filter and by giving the correct exposure.

It has been the writer's good fortune to spend several years in the Selkirk Mountains of British Columbia, a region of scenic grandeur and beauty equalled by few and surpassed by no other place on the North American continent or in Europe. To those whose blood flows freely and who are devotees of the God-of-the-open-air, the call of the hills is as urgent in the depth of winter, when the snow-covered mountains stand out against the deep blue of the sky and the trees look like Fairy-land with their snow-laden

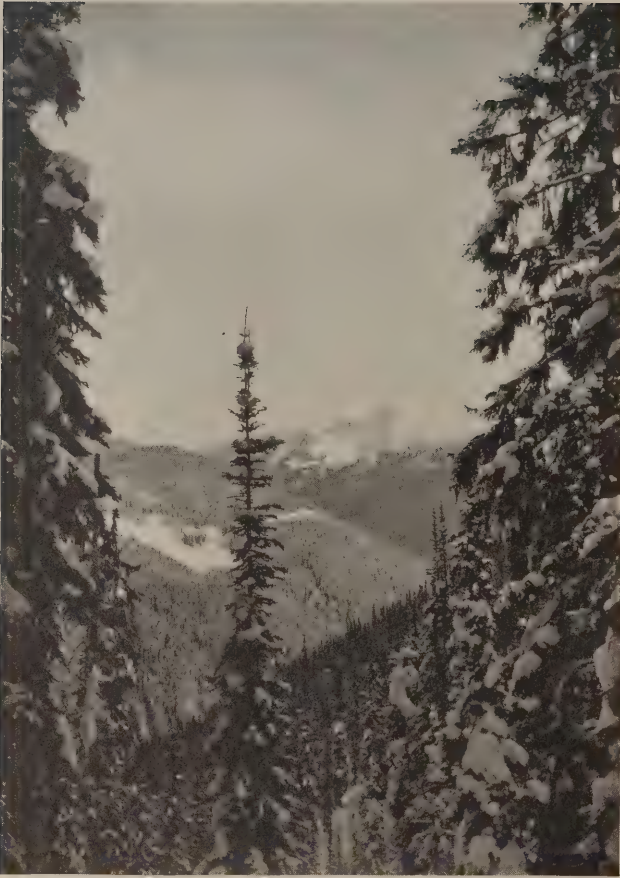
branches glistening in the sunlight, as it is in the spring or summer when the beauty of form and color of mountain and forest beckon irresistibly to those who have learned to love the

Light of the sapphire skies,
Peace of the silent hills,
Shelter of the forests, comfort of the grass,
Music of birds, murmur of little rills,
Shadow of clouds that swiftly pass,
And, after showers,
The smell of flowers
And of the good brown earth—
And best of all, along the way, friendship and
mirth.

Henry van Dyke

In these hills, prospectors' cabins and those of trappers are to be found in many places; sometimes in the valley beside a clear mountain-stream; sometimes precariously perched on a narrow shelf on the steep mountain-side with perhaps a brace against its lower side to prevent the snow in winter crowding it off; perhaps on a "flat" high up among the big trees; or perhaps right on the summit of the mountain, well above timber-line, where the heather and alpine flowers bloom in summer and where it is completely buried by the snow in winter. These cabins are never locked, their owners frequently going away for days and weeks at a time, leaving in them not only their outfits but food as well. Anyone passing that way is heartily welcome to use the cabin; and, if short of food, to cook and eat his fill, but the unwritten law-of-the-hills requires the wayfarer to leave the cabin and its contents in as clean and tidy a condition as he found it, and to replace any wood burned by cutting an equivalent supply, stacking it under the porch or in the cabin where it will be dry and handy for the next person having need of shelter and warmth.

In the Selkirks the snow gets very deep,



SILVER-CUP PEAK

NEWTON W. EMMENS

anywhere from five to thirty feet, depending upon the location and altitude; the snow-fall along certain belts being much greater than along others. It usually lasts from the end of November to the first of the following May in the open valleys and from the middle of October to the end of June in the hills. There is rarely any wind, the snow drapes the trees in a beautiful white mantle, the underbrush is completely buried, and each tree-stump wears a snow-cap that makes it look like a gigantic mushroom.

Outside of the towns and off the roads and main, traveled trails, it is, of course, necessary to use snow-shoes in the winter-time but there is nothing difficult in acquiring the art of using them. To be able, pack on back, to climb through the forest with no underbrush to bother, to one of the many cabins up near timber-line, make it headquarters, and from thence to explore the higher altitudes, going to the summits and

looking out over the sea of mountains spread out before one is a joyous experience, and is one to broaden the mind, sink into insignificance the petty trials and tribulations of this work-a-day world, and make one realise the truth of the thought so well expressed by the following lines from Henry van Dyke's poem "The God of the Open Air"—

"By the breadth of the blue that shines in silence o'er me,

By the length of the mountain-lines that stretch before me,

By the height of the cloud that sails, with rest in motion,

Over the plains and the vales to the measureless ocean,

(Oh, how the sight of things that are great enlarges the eyes!)

Lead me out of the narrow life, to the peace of the hills and the skies."

It has been suggested that this heavy snow-

fall does not lend itself to pictorial photography, and that making one's way through the snow-laden forest is more of an undertaking than is warranted by the results attained. The writer has not found this to be the case. It is well, however, to choose the proper time to go on these expeditions with the camera, and not to start out immediately after a fresh, heavy snow-storm, because the newly fallen snow is soft and one's snow-shoes sink in deep enough to make

shovel comes in very handy to cut a shelf on which to cross but, failing a shovel, which is not part of one's regular equipment, an axe will serve the purpose by cutting foot-holds in the hard snow by means of which the slope can be crossed in safety and comfort, first, of course, having removed the snow-shoes.

When on photographing expeditions, the writer always carries a light axe as it is very useful, not only in cutting out small trees and branches that



ST. ELMO CABIN

NEWTON W. EMMENS

very heavy going. By waiting a couple of days or so, it will be found that the snow has settled sufficiently to afford good traveling, the shoes only sinking in a few inches, and the climb through a veritable fairy-land to some vantage point, from which to watch the clouds and mists on vale and peak slowly disperse as the sun comes up, is a delightful, never to be forgotten experience, amply repaying one for the small amount of exertion required, and affording opportunities of obtaining some very worth-while pictures.

At times, when traversing the forest along the steep mountain-side one comes to places where the snow has slid over a bluff, forming a slope too slippery to walk over and too hard for the snow-shoe to get a good grip on, in such places a

obstruct the view, which if allowed to remain would spoil the picture, but also in cutting wood to make a fire, should such be required. Some of my readers may be skeptical regarding the practicability of building a fire on the deep snow in the open, but it is easy enough. First pack the snow by tramping it with the snow-shoes where you desire to build the fire, then cut a few sticks one-and-a-half to two inches in diameter and lay them, close together, on the packed snow to make a foundation for the fire, on these stack loosely the smaller sticks and split wood that are to serve as fuel, light it and you will soon have a cosy little fire going. There is no necessity for a big roaring blaze, a small fire that can be easily covered by an ordinary



A LARDEAU MUSHROOM

NEWTON W. EMMENS

sized dish-pan is quite large enough to boil the "billiken"—the can in which you make your tea or coffee—fry bacon, or get warm by. When done with, always be sure to completely put the fire out, either in winter or in summer, so as to avoid all possible danger to the surrounding woods. Get this habit firmly established. Carelessness and thoughtlessness in not thoroughly putting out camp-fires causes more damage to our forests annually than can be remedied in a hundred years of forest-growth.

In snow-photography the question of proper lighting is of paramount importance, and next to it is the avoidance of a flat, unbroken expanse of snow in the foreground. This latter can be obviated, if there be no shadows to take advantage of, by tramping back and forth a time or two in the direction of the point of interest in the picture, care being taken to avoid aimless wandering that might lead the eye away from

that point. The most satisfactory lighting is when the sun throws long shadows across the snow, and it makes little difference from which direction it shines, except from immediately behind the camera or directly into the lens. Where it is desired to include figures that are facing the camera, it is better to avoid direct sunlight because the reflection from the snow is too brilliant for the eyes, causing a strained expression; much more satisfactory results will be obtained on an overcast day or when the sun is obscured by a passing cloud.

The equipment used by the writer in making the photographs presented herewith consisted of a 5 by 7 camera with tripod, rapid rectilinear lens fitted with iris-diaphragm shutter, a three-time and a five-time ray-filter. Premo film-packs were used to make the negatives, and development was done in the tank using the Premo tank powders. Velox paper was used.



THE KING'S HIGHWAY
TROUT MOUNTAIN
NEWTON W. EMMENS

Along the roads, or where the snow is packed hard, there is, of course, no difficulty in using a tripod; but where the snow is soft and deep it is first necessary to tramp down and pack the snow, with one's snow-shoes, where it is intended to set up the camera, otherwise the legs of the tripod will sink in either too deep or unevenly, thus spoiling the picture.

The writer does not advise the use of such a large camera as a 5 by 7, because of its weight and bulk, except for special work. For general use a smaller, lighter and more compact instrument fitted with an anastigmat lens of F/4.5 or F/6.3 working aperture, a shutter capable of giving exposures of 1/200 of a second, focusing-panel; and, if possible, provided with, not only a rising-and-falling front, but also an adjustment that allows of moving the lens sidewise as well, will be found to fill every requirement. A good tripod, one of the compact, stout wooden ones is best for snow, and a couple of ray-filters, such as the Wratten K-1 and K-2 should also be provided; and, if it is intended to do much photographing of distant objects, such as one mountain-peak from another, a good telephoto attachment fitted to the lens, will be found very useful.

Owing to the brilliancy of the light reflected from the snow it is advisable to use non-halation material for negative-making, and, taking everything into consideration, it would seem that film is about the most satisfactory, particularly the cut panchromatic film. It is also very

necessary to provide one's self with a good pair of goggles to protect the eyes, one of the dark amber-colored variety will be found to fill the requirements very nicely, as they are much the same color as the ray-filters, give ample protection to the eyes, and are more satisfactory than either the blue or neutral tinted ones for photographic work; at least, that is the experience of the writer.

For developing, the writer much prefers the tank-method to that of the tray because it is productive of better and more uniform negatives. The important thing is to give the correct exposure and to err on the side of too much time rather than too little. The use of an exposure-meter or calculator is to be recommended, of which there are several good ones available, particularly when making photographs under unaccustomed conditions of light.

Of papers, upon which to make the prints, there is an almost endless variety to choose from and that best suited depends upon the negative, whether it be lacking in contrast, too much contrast, thin or dense, and upon the result desired. But to get the very best results from snow-pictures there is nothing to equal a lantern-slide that has been carefully tinted, because not only does a little color add tremendously to the effectiveness of the picture, but the transparency brings out the detail in the highlights and shadows far better than any printing-paper the writer has ever tried.



THE HAWTHORNS IN SEPTEMBER

DUANE P. HOTCHKISS

HONORABLE MENTION—WILD AND CULTIVATED TREES

Use of Cut-Film in Stereo-Photography

HAROLD D. GRIFFIN



TEREO-PHOTOGRAPHY has a new ally in cut-film, and the amateur who wishes to obtain attractive record-pictures would do well to investigate its possibilities.

No negative is easier to transport. If you are a devotee of the stereo-autochrome—as every stereophotographer should be—you already carry your plateholders with you. Break them into double service. Leave your film-pack adapter and your plates—other than autochrome—behind you and venture forth with a kit of cut-films. Cut-film with its fine grain and variety of emulsions will meet every situation that plates can handle, and do it better. It is non-halation, it is light, and it is unbreakable. The longitudinal scratches often so troublesome with film-packs will be a thing of the past.

Perhaps the first thing to be considered is the matter of weight and compactness. I put my cut-films in discarded autochrome-boxes, and can store in a given space more than three times as many as film-packs, and five times as many as plates. Two dozen extra-thin plates weigh eight times as much as two dozen cut-film negatives packed in an autochrome-box.

Cut-film may be obtained with a variety of emulsions—portrait, ortho and panchromatic—and the super-speed has twice the speed of the film-pack. With the panchromatic—about one-third the speed of the film-pack—the Wratten K-3 filter will give you true color-values on one of the best emulsions for landscape-photography with which I am familiar. This same emulsion will permit the use of the regular autochrome or of the Wratten “G” filter for distance work. The visitor to the Grand Canyon or other places in our West where long vistas need recording, will be saved disappointment by using panchromatic cut-film and a suitable color-filter.

Cut-film is by far the lowest-priced negative obtainable. I use a 45 x 107 mm. stereo-camera and my panchromatic and other cut-film negatives cost me less than \$.40 a dozen. Cut-film negatives may be purchased already cut to fit the 45 x 107 mm. camera for \$.60 a dozen. But why not cut them yourself and spend the difference? Perhaps your plateholders will take $1\frac{3}{4}$ x $4\frac{1}{4}$ inch films without allowing them side play. If so, one dozen 7 x 17 cut-film will give you sixteen dozen $1\frac{3}{4}$ x $4\frac{1}{4}$ inch films, or 5 x 7 cut-film will give four dozen. My plateholders are not so accommodating. I purchase $6\frac{1}{2}$ x $8\frac{1}{2}$ cut-film and cut it down to 1 13/16

x $4\frac{1}{4}$ inches. This takes up all side play and assures pictures with level margins. I trim off the extra 1/16 of an inch after development. Always leave the black paper in contact with the emulsion-side of the film while cutting and packing in the boxes. Panchromatic film should be cut in absolute darkness. This is not a difficult trick to learn with a paper-cutter, and I usually cut all my negatives that way.

My plateholders have a spring at one end to hold the plates perfectly level. Naturally, this spring is worse than useless so far as cut-film is concerned. I eliminate it and obtain a fairly accurate focal plane for the cut-film at the same time by inserting a piece of stiff cardboard $4\frac{1}{4}$ inches long, about an inch wide, and 1/16 of an inch thick, in the center of the holder.

For filling and changing my plateholders I use a changing-bag. It is easy to tell the emulsion-side of these small sizes of cut-film for it tends to be concave. I find it easier to insert the film in the opposite manner to a plate, that is, put the film under the projecting tabs near the velvet first and then slide in the edge toward the end spring. Be sure this end of the film is down where it belongs and not in the groove reserved for the slide. Be careful not to touch the face of the emulsion more than is necessary. The cardboard will hold the cut-film in a fairly even focal plane.

Development of the cut-film can best be handled in tanks. The Kodak developing-box No. 1, with Kodak cut-film developing-hangers, is perfectly satisfactory, although I use four heavy sheet-iron bread-pans about 8 x 5 x 3 inches that I picked up in a second-hand store for \$.10 apiece. I painted them inside and out with Probus chemical-proof enamel, and so I merely need to change my hangers from one to the other for developing, rinsing, fixing and washing. In this way a perpetual round of developing can take place by the time-and-temperature method. It is really surprising how quickly one can adjust oneself to the dark for the development of panchromatic films with no other aid than a radium-dialed Ingersoll, a thermometer and a flashlight covered with “Virida” papers or Wratten safelight papers for panchromatic film. Of course, the red safelight is as bad as no safelight at all, when working with panchromatic emulsions.

The regular 5 x 7 Eastman plate-tank developing-powders are highly satisfactory and will make 64 ozs. of developer—sufficient for the

developing-box or any other container which accommodates about 110 cubic inches of developer. Fifteen minutes development at 65° Fahr. for par-speed and ortho films, eighteen minutes for super-speed and twenty minutes for the panchromatic emulsions should be allowed. Use the developer but once.

The rinsing-bath should be composed of

Water.....	64	ozs.
Potassium chrome alum.....	1	oz.
Acetic acid (28% pure).....	1½	oz.

Rinse for two or three minutes and then place in an acid-hypo fixing-bath for about twenty minutes. Washing should not be prolonged more than half an hour.

Tray-development of cut-film negatives has been a failure, so far as I am concerned; and I do not wish to recommend it.

If there is need for intensification or reduction the cut-films may be treated.

Stereoscopic transparencies—often called diapositives—are much more pleasing than glossy paper-stereographs. I also must confess that they are more difficult to make. I think, however, that if you will follow the instructions given below, much of the difficulty will vanish.

Glass-transparencies are without doubt the best, especially those with exceedingly fine grain such as the Ilford "Alpha". But they are heavy, easily broken, and easily scratched. To put a cover-glass over them will remove the last-mentioned objection, remedy in part the second, but will double the weight. And then, our stereoscopes often will not take a double thickness transparency. A sheet of thin celluloid—Kodaloid, thin or medium—bound over the face of a positive is an excellent method to preserve glass-transparencies. If the celluloid becomes scratched in time, it may be replaced.

But for general utility purposes I employ cut-film positives bound with heavy Kodakoid. These transparencies are light, portable, and not easily scratched. The extra time spent in binding them will be amply repaid.

If your camera is the 45 x 107 mm. size, the most economical way to obtain diapositives is to purchase the 5 x 7 size of positive cut-film. This will give you four dozen positives for \$1.50, or less. The three-quarter by seven inch strip from each 5 x 7 film can be cut down to make trial-exposures.

The process-film can be used instead of the positive film to make stereo-transparencies; but it has a gelatin-backing that scratches more easily than the celluloid back of the positive cut-film. Both positive and process-film have about one-twentieth the speed of portrait-film.

A satisfactory developer for positive film may be prepared as follows:

Hot water (125° Fahr.).....	32	ozs.
Elon.....	10	grs.
Sodium sulphite (E. K. Co.).....	3½	ozs.
Hydrochinon.....	180	grs.
Sodium carbonate (E. K. Co.).....	1½	ozs.
Potassium bromide.....	50	grs.
Cold water to make.....	64	ozs.

Develop five minutes at 65° Fahr.

I use a modification of the time-and-temperature method of development that has proved to be a time and film saver.

In the first place I sort my negatives. As they are all developed by one kind of developer this is not a difficult task. A negative-comparator may be made by fastening two correctly developed negatives to the upper and lower thirds of a sheet of ground or opal glass, with a space left in the middle to hold the other negatives against for comparison. This can be done in the daylight. When your normal negatives have been thus grouped, other groups of more or less properly exposed and developed negatives can be sorted in the same way.

Try the proper time of exposure for one of the correctly exposed and developed negatives, using strips of waste positive. Vary the exposure for each half of the test-strips. Carry the test strips through the full process of developing, rinsing, and fixing. Wash for a couple of minutes, and dry in the breeze of an electric fan. The strips are now ready for inspection. The negative-comparator may again be utilised, this time with properly exposed and developed diapositives, either film or glass. Select in this way the proper time of exposure for each group of negatives. Each lot may thus be run through with a uniform exposure and developed afterwards. Do not vary the time of development, and see that the temperature remains uniform. Unlike pyro, this developer may be used for more than one batch of film.

Before binding the positives they may be lettered or numbered with India ink. If you wish to color them, now is the time to do so. Charming effects may be obtained with transparent oil or watercolors, if care is taken.

For binding cut-film positives you will need transparent heavy Kodakoid cut to the proper size, and strips of passe-partout binding. The ⅞-inch gummed passe-partout can be cut in four longitudinal strips, and these last folded lengthwise before moistening.

Cut-film is asking you for a fair trial. Test it, especially the panchromatic emulsion. Experiment with the various Wratten gelatin-film color-filters, and bring in some new thrills to your stereo-photography.



FIGURE 1 BEFORE SCRATCHING THE GREETING

WILLIS K. JONES

Saying It With Photographs

WILLIS KNAPP JONES



CCORDING to the advertisements, it is possible to say with flowers anything from "I love you", to "I'm sorry you have the toothache". Yet, there are ideas that even the florists cannot help you express. Words are needed. And how about using photographs to say them? With somewhat the feeling of

Bulwer Lytton—who, as you remember, once remarked that the only way to make sure of having an interesting novel was to write it himself—I shopped for Easter-cards, and birthday-cards and Christmas-cards. And, finally, I decided to make them myself.

It was simple enough. For an Easter-greeting, I set up some daffodils in a pitcher, set them

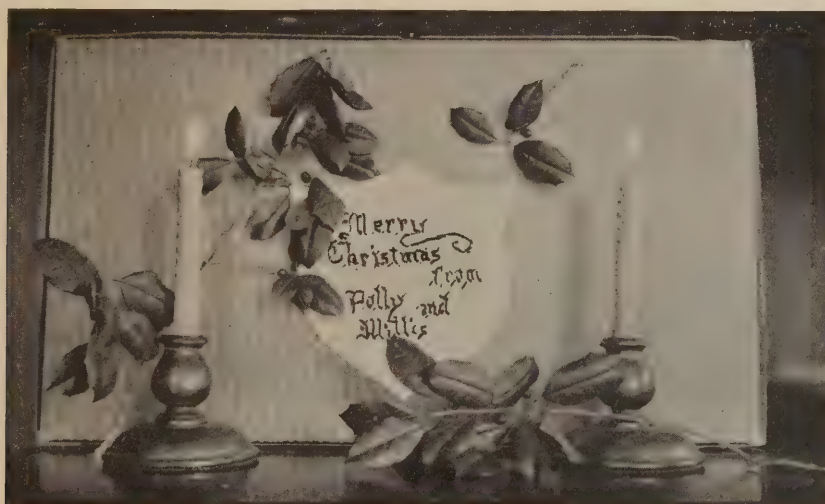


FIGURE 2 THE COMPLETED CARD, UNMASKED

WILLIS K. JONES

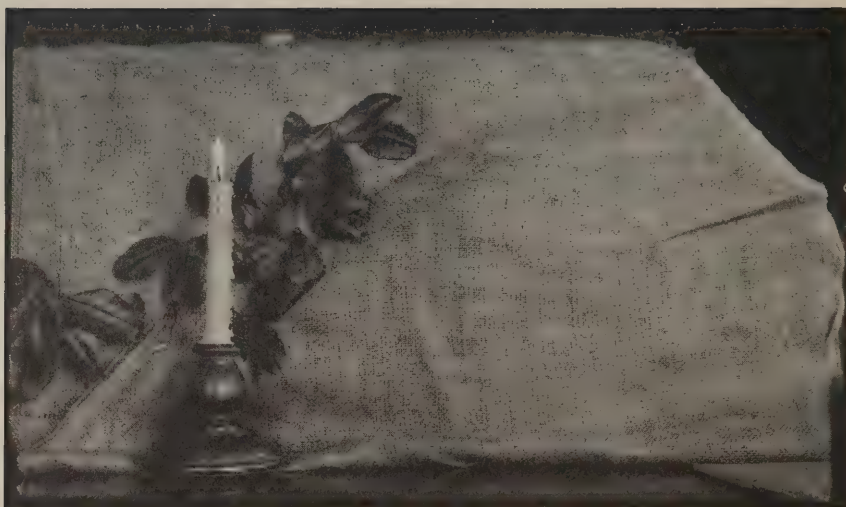


FIGURE 3 READY FOR ANY INSCRIPTION

WILLIS K. JONES



FIGURE 4 WITH INSCRIPTION, UNMASKED

WILLIS K. JONES

against a gray wall, pointed a Brownie camera at them and snapped. Then, I wrote "Happy Easter" or some other such banality on the film, printed a dozen copies, and my friends were so taken with the originality of the picture that the sentiment was overlooked. That was years ago. Now a Graflex has supplanted the littler camera, and the exposure is somewhat shorter; but the idea is just the same, and people seem to be just as eager to get the cards.

Because more people send Christmas-cards than other kinds, it may be helpful and interesting to describe those that I used last year. I made two different kinds. For one, all that was needed was a burlap-bag, a candle and a stick, and a spray of holly. These were arranged on the back of a chair against one end of the

There were several individual cards I wanted to make; and, not wishing to make an extra photograph for each, I used some old films that I had soaked in hot water till the emulsion was removed; and on the blank celluloid, with an ordinary pen and ink, I wrote my greeting. This extra film was placed against the negative, and the print was made through both. If one is extravagant, and does not want to bother with celluloid that curls at the least provocation, he can expose film number five—in a six exposure spool—without turning the number to the center of the red window, and leave number six unexposed. Then, upon development, he will have enough blank celluloid on the end of the roll to make two sheets upon which to write. Or, he can obtain the gelatin.



FIGURE 5 THE COMPLETED CARD

WILLIS K. JONES

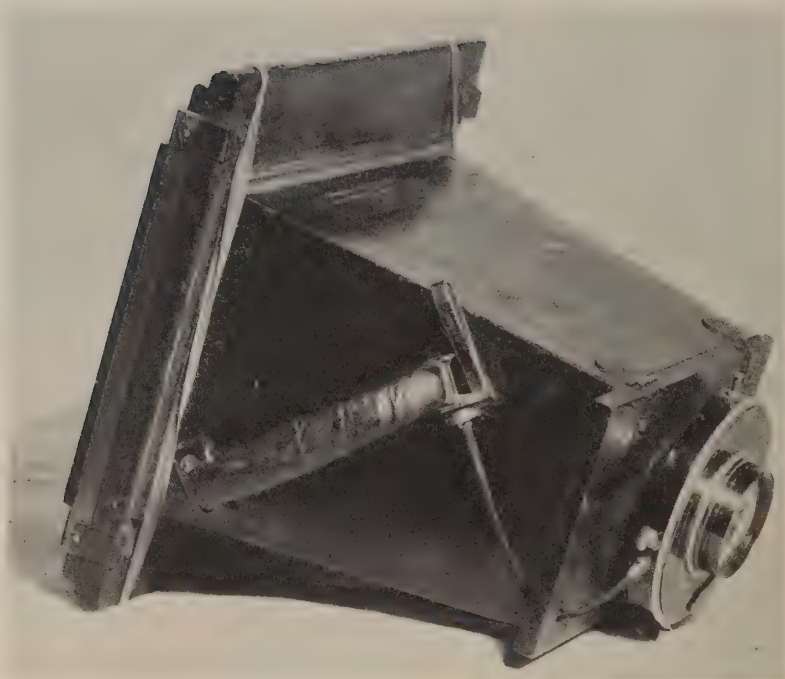
table, my camera rested at the other, and two desk-lamps, one with 100-watt and the other with 40-watt lamps helped out the weak daylight—the unequal lighting being to get shadows.

For the other, I used a suit box that had a slight pattern on it, the candle, and an extra tiny spray of holly. Then, as a background for a message of greeting, I cut a shield-shaped piece of paper which was pasted on the box. I wanted the greeting in black letters, so that I used a white paper. Had I used white letters, I would have used paper of a darker color.

The manipulation is simple. I gave an exposure of three seconds at F/8 on Eastman N. C. film. This was developed in the ordinary way. Then when the negatives were dry, I took the point of a knife and scratched away, on the face of the film, the message I wanted. This meant that I had to print the film reversed in order to make the message read correctly.

These are only suggestions. The main thing is to begin, and ideas will be plentiful. Silhouettes made with a flash-sheet, or snapshots of various kinds will do as the foundation for a greeting—a turkey for Thanksgiving, a firecracker for Independence day, a moonlight-scene or a harvest-field for Hallowe'en, and so on; and since the writing is done on a separate film, the picture is not spoiled for other uses. In fact, the recipient of the cards will value them more than they would the original picture.

One family volunteered the information last year that the only Christmas-card they kept was the greeting that came as a photograph. It did not cost nearly so much as an elaborate purchased card, it does not take long to make, and it shows that the sender thinks enough of the friend to go to a little bother. So, the next time you have something to say to that good friend of yours, say it with photographs.



MY HOME-MADE AËRIAL CAMERA

RUSSELL T. NEVILLE

Amateur Aerial Photography

RUSSELL T. NEVILLE



FEW years ago, our fair city was visited by a stray aviator who carried passengers for brief flights at fifteen dollars per trip. That was, and still is, a lot of money; but perhaps I got more thrill out of that ride at that price, than from any since, although today anyone may fly for less money. I sought permission to carry a camera aloft. About the only thing available in equipment that seemed at all suitable, was a 3A Graflex. Without knowing anything about conditions up above, I climbed blithely into the rear seat, was duly strapped in like a baby in a high-chair and asked to sign my consent to the aviator killing me without financial recourse.

As soon as we were fairly off the ground, I attempted, in my extremely limited sphere of action, to get busy with the Graflex. But the propeller blast, with the wind due to our speed, possibly augmented to some degree by the gentle breezes which normally blow, almost tore the camera from my trembling hands. The bellows

flapped like a sail in a cyclone and the focusing-hood collapsed with a tenacity worthy of a better cause. I didn't know whether to "shoot 'em" at a hundredth of a second or a thousandth, fully realising that I had vibration to contend with as well as the speed of the airplane to overcome. I tried both exposures. Then I hastened eagerly to the darkroom, as soon as my feet were again on firm land.

Some negatives showed an appalling triangle of wing. Some had queer lines running across them, which were later identified as being caused by including struts and cables in my view. A few—a very small proportion,—looked as a photographic negative should look. Fortunately, these better ones showed one of our large manufacturing plants fairly well. One company puts out a breezy little house-publication once a month. I showed my aërial pictures to the editor of that sheet, with all the pride and joy with which the fond new papa exhibits his first-born. Friend editor immediately wanted to buy these pictures for publication.

My price was \$25 for three views, postcard size. He kicked as no proverbial steer ever had the nerve to do. He talked of extortion. "Twenty-five dollars for three post-cards?" He never finished that argument with me, because I told him that if he wanted to buy postcards, he could find all he needed at the post-office for one cent each, and no sane man would think of paying more; but if he was discussing *aërial photographs*, my price was \$25 for three. I won. My ride was paid for, I had some aërial negatives and all was lovely.

Soon a couple of other bird-men came to town. I arranged for a flight when they would

maturing corn in a field adjoining the catalpas. Then with a crash, we struck, turned over, and I hung suspended by the so-called life-belt, from whose fond embrace I was utterly powerless to free myself. I hung head down wondering what next. Then the pilot, fortunately not injured, crawled under, cut the belt and allowed me to fall out on my head. Aside from a bleeding nose, caused by a bump against the edge of the cock-pit, I was all right. I found an ear of corn in my pocket, and I now claim to be the only person who ever picked corn from an airplane.

Half an hour later, I was flying over the city in the other machine, and again got a few pictures



AUTHOR, MECHANIC, AND PILOT

RUSSELL T. NEVILLE

not ordinarily be busy carrying passengers, and planned for a little longer ride above the city than was ordinarily given. At eleven o'clock the next morning, I presented myself.

The mechanics were fussing around the motors; but finally we took off. At the most dangerous height, about four hundred feet, the motor began to gasp and stutter, and before I realised what it all meant, I discovered that Mother Earth was rushing up very rapidly to enfold us. A large catalpa grove was right below us. This comprised about five acres, with the trees set out in close rows for fence-posts. Some agricultural genius persuaded a lot of farmers hereabouts that they could afford to raise their own catalpa fence-posts on land now worth five hundred dollars an acre. In time shorter than required to tell about it, I found that we were skittering over the tops of

with a large number of failures. Here we met with a new difficulty. We found that we could not thread the end of the protective paper which covers the roll-film, through the slot in the spool, while in the air. Too much vibration and too strong a wind. Unkind friends said I was too nervous. My retort was that they had never crashed in a plane and then gone up in another within a few minutes and tried to make pictures. But the average amateur will encounter this same difficulty about threading up the paper. I solved that problem, on my next flight, by obtaining several extra spools, threading the paper through the slots and fastening it securely, and then placing a rubber-band about both spools to hold it all tight. This was done on the ground before we started up.

Then I didn't have much chance to fly for some time. But recently, a local friend bought



THE FLYING-FIELD

RUSSELL T. NEVILLE

a "Jenny" airplane with Canuck wings. Maybe it is the other way around. I never can remember. But it doesn't matter much in an article on aerial photography. We began to fly again, and have been doing quite a bit of it, locally and on cross-country flights. My first flight in this ship was to make aerial pictures of thousands of acres of flooded land, including two towns. A total distance on this trip of about thirty-five miles was covered, and the work was done for a local newspaper.

I find that a Graflex is about the most difficult thing in the world to manage up aloft. It's heavy, cumbersome, and without adequate means of holding it securely. Then, too, the wind flutters the bellows and focusing-hood, adding to the vibration and other difficulties. A small box-kodak or camera is better than the Graflex, if nothing better is at hand.

I have another friend here, who runs an amateur photo-finishing plant. And he finishes them nicely, too. He was once upon a time in the photo-section of an aerial squadron, and saw a deal of service abroad with the English. But he's still a good photographer and very handy with tools. He said that he could make an aerial camera, by using the 5 x 7 reversible back from my Rochester View-Camera, with an old Optimo shutter which I had adapted to my Cooke F/5.6 lens, and could make it in half an hour, while he was resting. Of course, I knew he couldn't do it, and, told him so.

We knew where we could pick up one of these trick enlarging-affairs, funnel-shaped, all nicely painted and finished. You all know what I mean. One of the contrivances you put a negative into, at the small end, I guess it is, and a sheet of paper in a holder in the big end—in the darkroom, of course—and then rush out and point it up at the sky for a while. We bought the only one the dealer had left for a few cents. He had taken it out of stock and forgotten what it was for—if he ever knew—or why he had ever bought it.

First, Friend Brady cut it off square at the large end, at a point which would accommodate the 5 x 7 plate, or film-holder. Then he put a collar around it, fitted the reversible back so that it could be put on or taken off as easily as off the Rochester view-box with which it came. As it stands now, it requires only an instant to remove the back from the view-box, and snap it into the clips which hold it on the aerial camera. We calculated the length required to focus this lens at infinity, allowed just a little to cover any error, fitted a three-ply board over the small end, cut the hole for the shutter-mounting, and tried it out on the ground with test-exposures. Here we ran into a little difficulty; but nothing any amateur who is at all handy with tools need be afraid of. The resulting pictures at first were not in focus. With a wood rasp a little wood was worked off the small end and other exposures made. Finally,

we reached the correct place and the lens-board was made a permanent affair. The inside of the box was given a coat of dead-black paint and our most difficult construction-work was over with. A visit to the ten-cent store gave us a couple of heavy metal handles, similar to those used on shed doors. These were placed at such an angle, that when held parallel with the earth, we obtained an oblique picture that does not include the fuselage nor overhanging wings. These handles were then taped with

aërial photographs", and aërial photographs would result. It's a sad tale, but many, many a plate was exposed and the resulting negatives brought weeping, wailing, and gnashing of teeth.

We counseled together, did we three—former aërial photographer, who was good, pilot who was a good pilot but no photographer, and poor me, who was neither aërial photographer nor pilot. If I tried to photograph a greenhouse, the negative showed a corner of the wing and half the house. Perhaps one part of the picture



WALWORTH MANUFACTURING COMPANY

RUSSELL T. NEVILLE

insulating or tire-tape to afford a better grip. We experimented a little with peep-sight arrangements for a view-finder, but discarded them as being impractical and not necessary.

It is impossible to hold a camera high enough to use such accessories. An antinous-release was fitted to the shutter with the button conveniently placed at the end of the handle on the right side, so that it was in a natural position for the thumb to press.

Then with hopes high, we soared aloft. And once again we soared aloft. In fact, we soared aloft many, many times. And results were always about the same—from ten to fifteen per cent. of fair to middlin' negatives.

This rather took the joy out of life for us, because we believed that we had a fool-proof camera, and all we needed to do was to step into the ship, say "Take me up Fred, I crave

would be so sharp you could almost see the bees pollenising the flowers, and the rest so fuzzy that it looked like a flock of feathers in a snowstorm. Some negatives shivered all over, and some only shuddered in one corner. About every evil and fault you ever knew about, photographically, appeared to torment us, augmented by a flock of woes you know nothing of—unless you have tried aërial photography.

Carefully we three analysed my technique. I stood up in the front seat of the plane, turned around and leaned out the left side of the ship, bracing my right shoulder against the wing-strut, or rather holding the strut clasped between my shoulder and face, as I embraced it. Sometimes, to further steady myself, as the ship swayed and tossed, I leaned my left arm on the top of the fuselage. Finally, we decided that too much vibration was being communicated

to the camera via my arms, which were naturally quite rigid, to hold the camera steady. So I tried holding the camera out at arm's length, with arms relaxed as much as possible. I also changed my position on the strut some, leaning against it with my breast instead of my shoulder. That helped things a great deal. But still a lot of films showed light-streaks, fogged in some way. It was decided that in replacing the slides in the holders, I probably pried the holder away from the back of the camera enough to let light leak in. It's easy

And take it from me, the aërial men down there know photography. I wish that I might stay with them for some time and absorb their photographic learning. And I've been making pictures under all sorts of conditions for longer than some of these men are old—making them on the land, above it and below it, under about every condition that ever a photograph was made. But these boys are "there" and no mistake about it. I wanted to get expert advice on some of my troubles, aërially speaking. I was told that vibration caused a slight buckling in the



BAKER PARK

RUSSELL T. NEVILLE

to do with a slide that is a little tight, and especially easy to do in a swaying, tossing airship. So I tried especially hard to overcome that fault. Still the fogging continued. Then we decided that the tremendous wind-pressure against the little edge of the holder must be blowing the holder away from the camera. We reinforced the metal springs on the back, with heavy rubber-bands, and stopped this trouble. It simply shows what unexpected things you have to contend with.

Recently, it was my privilege to show this home-made aërial camera and some pictures made with it, to the expert U. S. Army personnel at Scott Field, Belleville, Illinois. That's the place Uncle Sam keeps all his blimps, or non-rigid dirigibles.

films in some instances, and this explained why some of our pictures were sharp around the edges, for instance, and fuzzy in the center, or vice-versa. I was told that the U. S. Air Service uses a sheet of optically corrected glass over their films to prevent this.

One of the officers examining our crude aërial camera said it was the first time that he ever knew a picture could be made with a piece of packing-box, a mass of rubber-bands, ten-cent store hardware and tire-tape. I called his attention to the fact that he omitted the one requisite—brains to use that equipment, and he acknowledged his mistake. I might add that a certain degree of what, for polite usage, might be designated as "intestinal fortitude", is required for aërial photography.



CAMBRIDGE, ILLINOIS

RUSSELL T. NEVILLE

We're not industrial photographers, but we find that many industrial plants are willing to pay exorbitant prices for good views of their works. This aerial camera can be duplicated at trifling cost if you already have a suitable lens and a reversible back from a view-camera.

The picture of Baker Park herewith, shows a new park recently donated to the city by a wealthy resident and shows one hundred and ten acres besides the area adjoining the park.

We now make exposures at $1/300$ of a second, according to the old Optimo shutter. It's possibly a little slower than that; but $1/150$ of a second will do and will be ample under ordinary conditions. We have tried panchromatic films and believe that they are better than the orthochromatic for this work. We tried orthochromatic film and a color-filter; but found it not so good, as it slows exposures up too much. Although panchromatic film is only rated at 70% of the speed of Eastman Portrait Film, we find that they give better color-values, cut down haze, and are more satisfactory in every way.

If you haven't time nor inclination to make such a camera as I have described, and want to try your hand at aerial pictures, I advise you to use a cheap little box-camera, simply sticking it over the side and snapping away blindly. You'll get just as good results that way as you can get under average conditions with a bellows-kodak or camera. The bellows-kodak will collapse, cutting

into the picture-area, and the wind will vibrate it so that results will be uncertain.

I've been aloft when this aerial camera of ours was almost snatched from my hands, despite the firm handles. You'll be surprised at the amount of wind-pressure you will find up there—and the propeller whirling around from 1400 to 2000 times per minute adds to all of that.

Gradually I have perfected my methods, profiting by costly mistakes. It's a good thing to sit down beforehand and rehearse every move, because the average person is more or less "up in the air" figuratively as well as physically, when off the earth. Procedure will be vastly different because of changed conditions, and unfamiliar ones constantly bob up to perplex you. It's a different thing entirely from pointing the lens at something on the ground that is stationary, telling it to look pleasant, please, and making an unhurried exposure—generally with more or less favorable and easily controlled conditions as to angles and the like determined beforehand. Aloft, you shoot when you can on the fly, in a wind-tossed ship, traveling at high speed, from divers and catch-as-catch-can angles, notwithstanding the best of co-operation from your pilot.

But it's a lot of fun, there's a thrill to it, and for myself, I now have a fine collection of aerial negatives which show our whole city, and I believe they'll constantly increase in value with the passing of the years. Try to see what you get.

A Survey of Books on Photography

WARWICK BARSE MILLER



ANY amateurs are probably not aware that there is a large number of books in print today which deal with photography; or if they do know it, from circulars and advertisements, they are puzzled as to which books are the best and which to buy for their particular needs. Excellent volumes are constantly being written about photography, even as in the other arts and sciences, and they teem with valuable information and recreative enjoyment. To acquaint amateurs with this fact and to enable them to select exactly the books they need, I have surveyed in the following article a field of the new and the old books that are worth reading. I have divided photographers into "beginning" amateurs and amateurs, and have classed the books under their respective subjects, so that selection will be facilitated. At the end of the survey I have given the location of the books on photography in the public libraries of seventeen large cities.

BEGINNING AMATEURS—By beginning amateurs I mean strictly beginners in photography who are just learning how to develop and print. Before beginning to practice the science, the beginner will be helped considerably if he reads some short, well-presented introduction, such as "The First Book of Photography" by C. H. Claudy, "Elements of Photography" by Frank R. Fraprie, "Chats on Photography" by W. Wallington, "Photography Simplified," and "Photographic Equipment," a simple description of equipment by Austen Hanks. All these books are clear, enjoyable reading. Wm. Gamble's "Photography" enters more into detail, and yet retains simplicity and clarity. It is a pleasure to read Clive Holland's "How to Use a Camera," and its chapter on "The Art of Making a Picture" is the best discussion of the meaning of a print that there is.

For the beginner who is beginning to practice, the best all-around textbook is R. Child Bayley's "Photography Made Easy; As Easy As A B C," written in clear everyday language; and "Practical Photography," a series of nine little volumes (50c a piece) by Frank R. Fraprie offer valuable help on such subjects as "Beginner's Troubles," "How To Make Portraits," and so forth. Every beginner should read Stanley C. Johnson's "Saturday With My Camera," for it treats uniquely the artistic and practical side of photography; and for the beginner who is fond of laboratory-work, the finest textbook is Alfred

Watkins' "Photography, Its Principles and Application," which explains photographic chemistry; although less technical, and more for pleasure-reading and yet very practical is "Practical Amateur Photography" by Wm. S. Davis. It is well worth reading. Other books and manuals are "Photography Indoors and Out" by Alex Black, "The Principles of Simple Photography" by F. W. Sparrow, "Early Work in Photography" by W. E. Henry, "First Steps in Photography" by J. C. H. Wallsgrove, "Photography in Winter" by H. Snowden Ward, "Photographers' Handbook" by Harrison and Douglas, and "Amateur Photography" by Beeson and Williams, most of which volumes cost less than a dollar. I should own either Bayley's or Watkins' book, and also the pamphlets published by the Eastman Kodak Company, such as "How to Make Good Pictures," "The Velox Book," and "Kodakery," the last being a monthly booklet with helpful articles sent free for one year to everyone who buys an Eastman camera.

AMATEURS—By these I mean, of course, those who have mastered the rudiments of the science and are ready to investigate the deeper processes. Amateurs will find good books on nearly all branches of photography. First, in the realm of art, there is that charming volume which photographer or layman can ill afford not to read, and that is A. J. Anderson's "Artistic Side of Photography," a broad, cultured treatment which cannot but inspire an appreciation for beauty in everyone who reads it. Paul C. Anderson's "Fine Art of Photography" is a good, clear textbook on art-principles; Antony Guest's "Art and the Camera" is exhaustive, but heavily detailed; and "Art-Photography in Short Chapters" by H. P. Robinson, "A Treatise on Art" by John Burnet, and "Human Anatomy for Art-Students" by Fripp and Thompson are all good; also "Light and Shade and Their Application" by M. Luckiesh. On pictorial and landscape work we have an enjoyable elementary treatment entitled "Pictorial and Landscape Photography" published by PHOTO-ERA MAGAZINE (now out of print); "Pictorial Landscape Photography," a collection of eight essays by the Photo Pictorialists of Buffalo explaining their theories; Paul C. Anderson's "Pictorial Photography, Its Principles and Practice," a good text, also "Pictorial Landscape Photography" by the same author; the excellent "Pictorial Composition in Photography" which

ranks with A. J. Anderson's book; "Artistic Landscape Photography" by A. H. Wall; "Pictorial Composition and the Critical Judgment of Pictures" by H. R. Poore, and "Composition," a series of exercises on art-structure, and rather advanced. Inexpensive booklets are "Practical Pictorial Photography" by A. H. Hinton, "Pictorial Landscape Photography" by John A. Hodges, and articles in *Photo-Miniature*.

Because portraiture depends largely on the judgment of the photographer himself, there are but few books on that subject. One excellent plain-spoken treatment which embodies a new viewpoint on American art is "Art-Principles in Portraiture" by Otto Walter Beck, a member of the Architect League of New York. Small booklets are "How to Make Portraits" in the *Practical Photography* series; "Portraiture for Amateurs Without a Studio, Part I, Technical" and "Portraiture for Amateurs Without a Studio, Part II, Pictorial," both by Rev. F. C. Lambert; "Home-Portraiture Made Easy" by A. H. Hinton; "Lively's Method of Lighting" by W. S. Lively; and articles in Nos. 109, 129, 136, 137, 141, and 152 of the back numbers of *Photo-Miniature* also "Portrait Lightings" by Will H. Towles.

Among the outstanding general textbooks are Alfred Watkins' "Photography: Its Principles and Application", the best complete elementary text; "Photography for the Amateur" by Geo. W. French, a book used as a supplement to lectures in the New York Institute of Photography; "The Complete Photographer" by R. Child Bayley, less technical and broader than the two former volumes; "The Science and Practice of Photography" by H. Chapman Jones; and "Photography" by A. B. Brothers is a little old and heavily detailed. The amateur should know something of physics and chemistry before reading John R. Roebuck's "The Science and Practice of Photography" and Prof. Louis Derr's "Photography for Students of Physics and Chemistry", two excellent texts written entirely from the viewpoint of the two sciences mentioned. Also "Instruction in Photography" by Sir W. de W. Abney, and "The Fundamentals of Photography" by C. E. K. Mees.

For books on special subjects, the student who does not know much chemistry will find Wm. R. Flint's "Chemistry for Photographers" the best textbook; Elwood Hendrick's "Everyman's Chemistry" is more general; and a good introduction is Chas. F. Townsend's "Chemistry for Photographers"; and Louis Derr's "Chemistry for Photographers" is an advanced treatment of lenses, and chemical and printing-processes. "Experimental Photography" by C. J. Leaper is

short and elementary. "The Silver Sunbeam" by J. Towler (1864) discourses on sun-drawing, wet and dry plates, collodion, albumen, gelatin, wax, resin and silver; and "Gelatin in Photography" by S. E. Sheppard is a series of monographs on the theory of photography from experiments in the research laboratory of the Eastman Kodak Company.

An excellent textbook for the beginner in color-photography is E. J. Wall's "Practical Color-Photography"; and "Color-Correct Photography" by T. Thorne Baker is for those who have "neither great theoretical knowledge nor practical skill"; and "Natural Color-Photography" by Koenig and Wall, and "Photography in Colors" by G. L. Johnson are two good manuals, the last being rather scientific. "Three-Color Photography" by Baron A. von Hübl is rather advanced, and likewise with O. Reg's interesting "Bypaths of Color-Photography". Elementary booklets are "How to Make Prints in Color" by Frank R. Fraprie; "The Photography of Colored Objects" by C. E. K. Mees; "How to Color Photographs and Lantern-Slides" by Richard Penlake; and "Lumière Autochromes", a pamphlet published by the R. J. Fitzsimons Corporation, U. S. agents for these plates.

"The Art of Retouching Negatives And Practical Directions How to Finish and Color Photographic Enlargements" by Robert Johnson is the best textbook on retouching, and good guides are "Practical Retouching" in the *Practical Photography* series; "The Art of Retouching" by J. Hubert; and "Retouching" by Arthur Whiting. In airbrush-work George F. Stine's "The Airbrush in Photography" and S. W. Frazer's "Treatise on the Airbrush, With Progressive Lessons" are both good texts, leading the beginner gradually from the simpler to the more complex processes.

"How to Make Enlargements" of the *Practical Photography* series; "Photographic Enlarging" by R. Child Bayley; and "Enlargements, Their Production and Finish" by G. R. Smith are all good elementary treatises. On nature-photography we have "Outdoor-Photography" by Julian Dimock; "Nature Photography for the Beginner" by E. J. Bedford; "The Camera in the Fields" by F. C. Snell; "Photography for the Sportsman-Naturalist" by L. W. Brownell; "Nature-Photography" by Stanley Johnson, a very good elementary book; and "Photographing Flowers and Trees and Decorative Photography" by J. M. McFarland. All these books are fine, especially the first three.

On other subjects there is "The Science and Practice of Photographic Printing" by Lloyd I. Snodgrass; "How to Make Good Prints" by M. D.

Miller; "P. O. P" by H. Hinton; "Bromide Printing" by F. C. Lambert; "Platinotype Printing" by A. H. Hinton; "The Gum Bichromate Process" by J. C. Richards; "Photo-Acquaint or the Gum-Bichromate Process" by Maskell and Demachy; "The Oil and Bromoil Processes" by Mortimer and Coulthurst; "A B C Guide to Autotype Carbon Printing" by the Autotype Company; "Carbon Printing" by E. J. Wall; and "A New Treatise on Modern Methods of Carbon-Printing" by A. M. Marton. For optics there is "How to Choose and Use a Lens" by F. R. Fraprie; "The Lens-Part of Photography" by R. D. Gray; and "Lens-Work for Amateurs" by Henry Orford, three short elementary books. Longer treatises are "Physical Optics" by R. W. Wood; "Outlines of Applied Optics" by P. G. Nutting; "A Treatise on Photographic Optics" by R. S. Cole; "Optics for Photographers" by Dr. Hans Harting; "The Lens" by Bolas and Brown; and "The First Book of the Lens" by C. W. Piper. In photomicrography we have George West's "The Practical Principles of Plain Photo-Micrography", a good book for the beginner; Martin Duncan's "First Steps in Photomicrography"; "The Handbook of Photomicrography" by Lloyd Hines; and Brough Randles (an excellent text); "The A B C of Photomicrography" by W. H. Walmsley; "Practical Photomicrography" by J. E. Barnard; and "Elementary Photomicrography" by Walter Bagshaw. In Commercial photography L. G. Rose's "The Commercial Photographer" tells how to make industrial photographs and F. R. Fraprie's "Cash From Your Camera" tells how the amateur can sell his pictures; and there is also "Making Your Camera Pay" by Frederick C. Davis; "Photographs for the Papers: How to Take and Place Them" by John Everard; "Photography for the Press and Photography for Profit" by F. J. Mortimer. On Engraving we have "The Photo-Engraving Primer" by S. H. Horgan; "Photo-Engravers Handbook on Etching and Finishing" by P. C. Raymer; "Commercial Engraving and Printing" by C. W. Hackleman; and "Photoengraving" by Amstutze (revised edit.); also "The Halftone-Process" by Julian Vervasser, and "Halftone and Photo-Mechanical Processes" by S. H. Horgan.

On Miscellaneous subjects there is "The Secret of Exposure" by F. R. Fraprie; "How to Ensure Correct Exposure" by A. H. Hinton; "Unit Exposure and Actinometry" by F. M. Steadman; "Magnesium Light Photography" by F. J. Mortimer; "Practical Development" by M. D. Miller; "Developers and Development" by George E. Brown; and "Development Made

Easy" by A. H. Hinton; "Photographic Amusements" by W. E. Woodbury; "The Photography of Moving Objects and Hand-Camera Work for Advanced Amateurs" by Adolf Abrahams; "Lantern-slide Making" by Rev. F. C. Lambert, and "The Lantern and How to Use It" by Norton and Bonner, and "Practical Slide Making" by G. T. Harris; "To Make Bad Negatives into Good" by A. H. Hinton; "Mounts and Frames and How to Make Them" by F. C. Lambert, and "Practical Frame Making" by W. L. Noverre; "Telephotography" by T. R. Dallmeyer; "Modern Telephotography" by Capt. Owen Wheeler, and "Telephotography" by C. F. Lan-Davis; "Airplane-Photography" by Herbert E. Ives; "Bromoil Printing and Bromoil Transfer" by Dr. Emil Mayer; and "Modern Methods of Book Illustrating" by H. Trueman Wood (rather old).

The best encyclopedia of photography is the ten volume Schriever and Cummings edition of "The Complete Self-Instructing Library of Practical Photography", and the best one volume dictionaries are "Cassell's Cyclopaedia of Photography" and "Wall's Dictionary of Photography". "Hasluck's Book of Photography" is a huge text, but you can invariably find here what you can't find anywhere else. A few manuals are "Cramer's Manual on Negative-Making and Formulas" published by the Cramer Plate Co.; "The Amateur Photographer's Manual" published by the Gundlach-Manhattan Optical Co.; "Manual of Photography" by Alfred Brother; and "A Manual of Photographic Technique" by L. J. Hibbert.

Much valuable information can be found in back numbers of magazines kept in bound volumes in every public library. All one has to do is to ask for "The Reader's Guide to Periodical Literature" at the information desk of the library, and under "photography" he will find any branch he desires, and it will give all the articles that have been published during the year with the name and month of the magazine. Magazines in circulation at present are: PHOTO-ERA MAGAZINE, *American Photography*, *Camera*, *The British Journal of Photography*, *Abel's Photo-Weekly*, *Photo-Miniature*, *Bulletin of Photography*, and *Camera Craft*; and magazines which have ceased publication are *Wilson's Photographic Magazine*, *The Amateur Photographer*, *The Practical Photographer*, *The Photo-Beacon*, *The Photographic Times*, and *Photographic Mosaics*. Also, I forgot to mention that in connection with the books on artistic work the amateur will find it an invaluable help to study the collection of beautiful prints published yearly in England under *Photograms*. This same idea with prints

is carried out in America with articles in Percy Howe's annual collection of the same called *The American Annual of Photography*.

For pleasure reading "The Romance of Modern Photography", and "The Marvels of Photography", both by C. R. Gibson, and "The Story of Photography" (history, short) by Alfred Story are three very entertaining books; also "Picture Making by Photography" by H. P. Robinson. A fine collection of English essays is "The Barnet Book of Photography", while heavier, older books are D. W. Abney's "Photography", and W. Vogel's "Progress of Photography".

This is not a complete survey of all the books on photography; but I think that I have included all the important ones which the amateur will be interested in and which are likely to be in large public libraries.

The following is the location of the photographic books in seventeen large cities. Where the books are scattered around, as they are in the Boston Public Library, it is best to look up your volume in the card-index and let the clerk find it.

BOSTON PUBLIC LIBRARY: Third floor, Art Department. Through room at the head of the stairs, and then to right.

CHICAGO PUBLIC LIBRARY: In the circulation department with the Fine Art books. They are all in one place.

DENVER PUBLIC LIBRARY: First floor, circulation department, in open shelf-room. All in one place.

LOUISVILLE FREE PUBLIC LIBRARY: 1st floor, Open Shelf-Room. Reference books in Reference Room, 1st floor.

LOS ANGELES PUBLIC LIBRARY: 1st floor, Department of Science and Industry in new building open in January. 9th floor of present building.

NEW ORLEANS PUBLIC LIBRARY: Together, except books relating to other subjects.

PHILADELPHIA, THE FREE PUBLIC LIBRARY OF: Art, Circulation, Periodical, and Reference Departments.

PITTSBURGH, CARNEGIE LIBRARY OF: 1st floor, Circulation Department. Magazine files and year books in Reference Department.

DETROIT PUBLIC LIBRARY: New and popular volumes are in the circulation department 2d floor. The rest are in the stacks and must be called for by number in card-index.

KANSAS CITY PUBLIC LIBRARY: The decimal system is used, certain volumes of reference do not circulate. Others are in circulation department.

NEW YORK PUBLIC LIBRARY: 7th floor in main stack-room. In one place.

PROVIDENCE PUBLIC LIBRARY: 3d floor art department on left. In one place.

SAN FRANCISCO PUBLIC LIBRARY: In the stacks off the reference department. In one place.

SEATTLE PUBLIC LIBRARY: 4th floor, art department. All in one place.

SPRINGFIELD, MASS., PUBLIC LIBRARY: Main floor, Art Department. In one place.

WASHINGTON PUBLIC LIBRARY: Lobby of main floor, In one place.

In the next article I will select from this survey books which are suitable for an amateur photographer's library.

Photographing Diatoms

DR. GEORGE L. ROHDENBURG



EVER since man first developed to that point where he became able to draw, objects of nature have been a source from which he has derived inspiration for formal design. For example, legend tells us that the capital of the Corinthian column is the conventionalised presentation of a basket about which the foliage of an acanthus bush has grown; and those who are versed in the history of art can recite similar instances of the origin of other formal and accepted motives used in design.

In addition to the world which is visible to our unaided eye, there exists another world which remains hidden until the microscope is employed. This hidden world is also rich in motives which may be practically applied in design. One of these hidden wonders, the snow-crystal, is undoubtedly familiar to many; and in one form or another more or less conventional-

ised it has been applied by designers particularly to textiles.

It is our present purpose to present some illustrations of another section of the invisible world in which the design and architecture are possibly as beautiful and more varied than are the snow-crystals. With the advantage over the snow-crystal that, at times, there are also observed charming color-combinations, the diatoms, minute as they are, are to be considered as much a wonder of nature as are its grander manifestations, the ice-covered mountains and rushing rivers.

In the depths of the ocean there exist untold millions of animals whose size varies from fourteen to two hundred one-thousandths of a millimeter. As with everything else that possesses life, the time comes when these minute forms having accomplished their task, die and sink to the ocean's bottom. At other times,



A GROUP OF DIATOMS

DR. GEORGE L. ROHDENBURG

huge convulsions of nature at one moment kill uncounted numbers. These dead organisms become infiltrated with mineral constituents and form the basis of the chalk-deposits to be found throughout the earth. Brought from the ocean's floor they can, after certain preparations, be examined under the microscope and permanent records of their form made by photography, the usual photomicrographic procedures being employed.

Aside from their design, and in many specimens their play of color, which color is most probably produced by the refraction of light brought about by their structure, they offer a test of technical skill. When viewed purely from the standpoint of design, they are harmonious arrangements of curves and straight lines—an arrangement which immediately emphasises any spherical aberration of the lenses of the microscope.

The photographic data of the present series may be of interest. The source of illumination was a tungsten arc-lamp which gives an almost monochromatic light. The exposures were made on Process cut film, and development was with a strongly alkaline hydroquinone. The exposures varied from 1 to 4 seconds. Filters were not used in making these exposures.

Technically, figure 1 is called *Thunnia elegans* and it comes from Austria. The magnification is approximately 500 diameters. Those who are interested in the game of pool will note the familiar arrangement of a number of spheres. Figure 2, which resembles a jewelry design, is an enlargement at 500 diameters of the *Navicula geunata* from the Gulf of Naples. Figure 3, which might inspire a cubist, is the *Spongia spinella*, times 300 diameters. The *Actinoptychus heliopelta*, figure 4, comes from Maryland, and like figure 5, the *Foraminiferne* which comes from Australia, is enlarged 500 diameters. The *Synapata digitata*, figure 6, comes from the South Seas and is the original anchor-design made by nature millions of years before man ever applied to it the undignified name of mud-hook. Figure 7, *Arachnoidisen ornatus*, reminds one of the charts of recording-thermometers. The butterfly-form of figure 8, the *Lithochyteis pyramidalis* is found in the Barbados, and *Myriotrochus eniku*, figure 9, comes from the South Seas; both are magnified 500 diameters. The cartwheel form of figure 10 is the *Chirodota pranaensis*, also from the South Seas and also enlarged 500 diameters. Indeed, nature supplies us with designs of remarkable beauty which possess marvelous artistic technique.

A Velvet-lined Camera Carrying-case

PAUL HORST

IT is needless to say that a carrying-case of some description is absolutely necessary for the protection and preservation of the ordinary hand-camera. This is particularly true of the camera which is carried about a great deal by those who indulge regularly in outdoor activities, such as, hunting, fishing and hiking. There are, of course, a great many varieties and styles of camera carrying-cases, running from cheap unlined, imitation leather or fiber-cases to the most elaborate velvet-lined genuine leather-cases.

But with most amateur photographers, oiled sole-leather cases without lining seem to be the most popular. As for the leather-feature of the case, this is to be desired where it is subjected to any degree of abuse. However, when it comes to the question of a velvet lining, carrying-cases which are regularly put out with this lining are of such a grade and quality as to demand a price which is almost prohibitive to the average amateur-photographer.

Yet, the advantages to be gained from a velvet-lining are far from imaginary. In the first place, a soft layer such as the velvet provides between the hard leather-wall of the case and the camera proper, prevents the camera from "jiggling" and vibrating at every rapid or violent action from the individual who is carrying it. This affords a very material protection to the shutter-mechanism, especially the more expensive and complicated shutters. In the second place, a velvet-lining preserves the leather or fabric

which covers the camera as it not only holds the camera rigid but also provides a soft resilient surface of contact.

Now, even though the average velvet-lined carrying-case is somewhat more expensive than the unlined, the economical photographer can easily line his own case provided he is at all handy in making things.

Most carrying-cases are large enough so that the camera fits into them rather loosely. This, of course is necessary if a lining is to be put into them. The kind and quality of lining to be used is largely up to the individual. To be sure, the better the quality of the velvet, the longer will it wear as a carrying-case lining. However, as to the weight of the cloth, this must be governed by how snugly the camera fits into its case. As a rule, if the case has been particularly made for the camera in question, there will be very little free space between the camera and the walls of the case. Hence it will be necessary to get the thinnest velvet possible. Enough material to do the job can usually be found about the house; on old hat-trimmings, on discarded garments, or even draperies.

For most purposes, the velvet to be found around the house is light weight and adapted to case lining. But once in a while a case is found, or otherwise obtained, which is exceptionally large for the camera and then a heavier grade of velvet must be used than is found on discarded garments. In this case, one can usually get a heavy cloth at any automobile trimming and upholstering shop. Comparatively little velvet

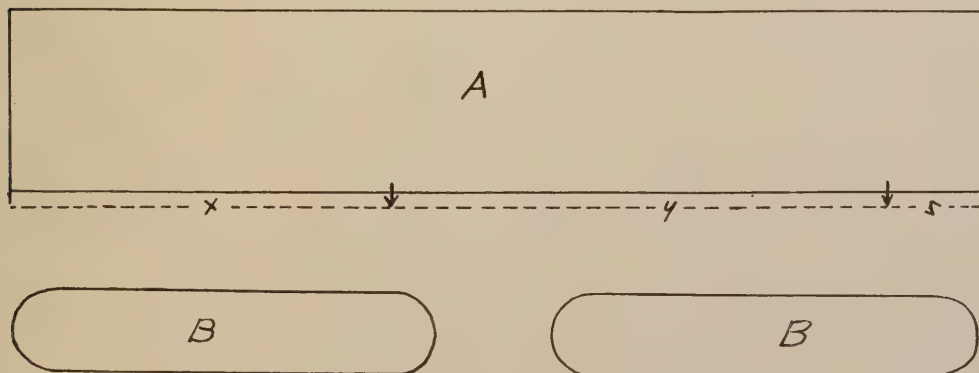


FIGURE 1

PAUL HORST

is required and generally scraps from closed car lining or upholstering can be found in such shops, which the proprietors will be glad to dispense with.

The lining-operation itself is simple. Only three pieces of cloth are needed. These are shown in Figure 1. The diagram (A) represents the piece which covers the front, back, and the rounded upper and lower ends of the case. Its width is determined by the width of the camera and not by the width of the case. The length (x) indicates the section reaching from the mouth of the case in front down to the lower end; (y) extends up the back to the top of the case; (z) covers the flap and when the case is closed extends downward to meet the opposite end of the strip.

furnish several extra brushes with the purchase. The long handle (x) must be long enough so that when tapered and thrust into the hollow tin tubing handle of the brush (y) the entire contrivance will enable one to reach with ease the lower end of the case. It may be made from anything which happens to be at hand such as cigar box or store-box wood.

The brush (C) is used to coat the lower end of the case; (C) is for covering the sides. A right-angle bend is made about one quarter of an inch above the base of the bristles with a pair of common automobile-pliers. However, it must be bent away from the seam in the tubing-handle. Otherwise, if bent toward it, the seam will open and release the bristles.

In applying the glue to the inside of the case

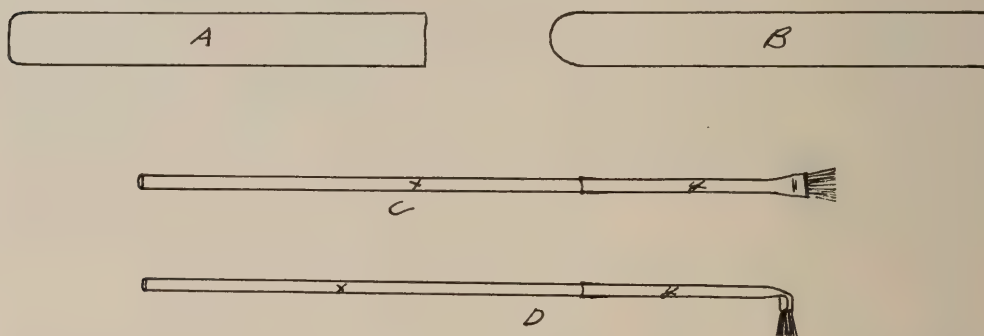


FIGURE 2

PAUL HORST

The outlines of the pieces (B) are determined by placing the camera on its side upon the cloth and making its outline on the velvet with chalk. These figures should then be cut out inside the chalk-marks in order to result in pieces which will be congruent with the sides of the camera. All marking should be done on the wrong side of the velvet as the face will not receive clearly defined and accurate chalk-marks.

To put in the lining, the few simple instruments shown in Figure 2 are required. The drawings (C) and (D) represent brushes for coating the inside of the case with glue. The lower ends of these instruments are merely brushes which are regularly provided with Le Page's glue. If no glue is at hand the most convenient form to buy it in is in the small full-mouthed bottles such as are sold of the Le Page's brand or any similar kind. One bottle of this kind is sufficient for the average sized lining-job. The glue can be bought at any drug store and most clerks will be glad to

the lower end is first coated with the brush (C). Then with (D) the sides are smoothly and evenly coated. A third brush, without an extension handle, is used to coat the backs of the velvet-lining sections and the enclosing flap of the case. The glue itself should be very thin so that only the barest film of a coat need be applied. If too much glue is used it will permeate the cloth and sag into the corners of the case. Then, when dry, it will form a flinty surface which is much more injurious to the camera-covering than the leather itself.

After the glue has set enough to ensure a dependable adhesion between the two surfaces the lining-pieces are put in. Section (A) of figure 1 is drawn around the camera and held in such a position that the end (x) lies across the face of the camera in a line coincident with the edge of the mouth of the case. Then the camera with lining-strip held to it is thrust into the case. When it is withdrawn the lining will remain.

To put in the side pieces a narrow thin piece of cigar-box wood as shown in (B) of figure 2

is employed. This piece must be a trifle narrower than the thickness of the camera and about an inch longer than the length. The rounded end must conform to the rounded end of the camera. To put in the end strip it is folded transversely in the middle to hang over the rounded end of the wood strip, glued side out. The case is now held inversely and slightly inclined and the strip is thrust up into it until the end of the strip lies directly against the open end of the side of the case. With a slight pressure of the wood-paddle against the side of the case the upper half of the strip is forced to adhere. Then the case may be righted and

the other half of the strip allowed to drop down into place. This is also pressed against the side of the case.

All the corners on the rounded end of the paddle have been smoothed off with sand-paper. With this end the strip is now chaffed its entire length into the side of the case. The piece (*A*) similar to (*B*) except that it is not so round is used to chaff the front and back of the lining firmly against the walls of the case.

Although, for the sake of clarity, these directions have been given somewhat at length, the average individual should accomplish the operation in a little over an hour.

Practical Kinematography

HERBERT C. MCKAY

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Chapter X—Airplane-Work



THE work of the kinematographer is carried on in all parts of the world. Wherever other men go and wherever sufficient light exists, there the kinematographer will at some time or other find work to do. The airplane is coming to be such an important factor in our everyday life that the kinematographer whether he be a news, review, advertising, engineering or studio-worker, will find it necessary, at times, to work from such a position in the air.

The usual plane will be of the open cockpit type, such as the later scouting-machines. Although the usual position of the pilot is in the rear cockpit, it is better in kinema-work if he takes the front controls, leaving the rear cockpit to the kinematographer. For short bits and hurried trips, it is possible to set the tripod upon the framework of the fuselage, lashing it fast; but such a procedure is not advisable. It is awkward for the kinematographer; but, worst of all, there is danger of interfering with the controls, and such a thing would be literally fatal.

It is far better to fasten a stout board across the cockpit, with screw-clamps to hold it firmly in place. To this board is screwed the head of the tripod, and the camera mounted upon this. If this arrangement has been carefully adjusted, camera-work may go on regardless of the position of the plane. As this work requires the full attention of the kinematographer, it is, of course, very necessary to use the life-belt regardless of the contemplated positions of the plane. This

is even more necessary as the kinematographer will often be facing backward, kneeling upon the seat. If the plane is a military machine, and has gun-swivels, the camera can be mounted directly upon these, and this greatly facilitates the work.

The pilot must understand the objective; for his assistance is necessary to obtain good pictures. It is evident that with the camera mounted over the center of the cockpit nothing approaching the vertical can be photographed by means of the tilt-head. In this case, the pilot can materially assist by swinging his plane to tilt sidewise.

If a definite objective is in view, the camera can be mounted near the edge of the cockpit on one side which greatly facilitates the work. If mapping is to be done—such as in preliminary surveys—the camera can be suspended vertically, and cranked at slow speed. At any great height, while the speed of the plane may be great, the absolute movement of the ground is apparently slow, due to the great field of view at such a height. When we consider that the lens-angle is still greater than the eye-angle, it is easy to understand that a slow crank will not only serve to conserve film, but will make the film easier to view. Of course, the detailed aerial survey is a work for the magazine mapping-camera.

The usual open plane of today throws oil from the motor. It is of the utmost importance that the lens be shielded from this oil-spray, for a film of dirty oil upon the lens will ruin film more quickly than anything else. You



THE ELMS

U. STEPHEN JOHNSON

HONORABLE MENTION—WILD AND CULTIVATED TREES

might as well try to make the film with a lens covered with greasy finger-marks. Keep the lens capped while not in actual use; and, when in use, try to confine the direction of work to the hemisphere whose plane side shall be a plane perpendicular to the fuselage and passing through the camera. In other words, shoot backward, up, down, right or left; but always back of the centerline. This gives one hundred and eighty degrees lateral swing, with a possible twenty degrees cut out by the tail and rudders of the machine and this should be ample.

The atmosphere of this old Earth is far from transparent. The usual amateur has considered it so; but those who have tried photographing distant mountain-peaks, bird's-eye views, or attempted telephotography can testify that haze is a serious problem, especially as it is often opaque to the plate when transparent to the eye. This is due to extreme refraction or scattering of the rays of light. From available data it seems that the longer light-rays are the strongest.

Not in their ability to affect the photographic emulsion; for in this case the short rays are the more active; but with regard to their response to obstructive factors. Thus in spectrum-formation the red, or long, rays are bent least from the path of the composite ray, and the blue rays are bent farthest. In like manner, haze scatters the ultra-violet, violet, and blue rays far more than it does the red. This results in some curious phenomena in connection with the use of color-filters.

If a photograph of a distant object is made through a haze with an ordinary plate, a fine fog will result. If, however, the exposure be made upon a panchromatic plate with a K-filter of proper strength, the view will be rendered approximately as the eye sees it, but if a deep red filter be used, the plate will show only a bare trace, if any, haze or fog. At the same time, the color-correction will suffer from over-correction.

This begins to open the way for successful

aërial photography; but as a red filter lengthens exposure, it is not practical. The use of the ordinary meter-reading and multiplication-factors of the filter might make such an exposure appear practical; but there is one point which must be taken into consideration. The short exposures in sea, beach and aërial photography are based upon the great amount of available, highly actinic ultra-violet light which is present. If we use filters which absorb this light—and we have seen that to overcome haze the filter must absorb it—we cannot allow this factor to enter into the calculation, so our basic exposure should be calculated as for an ordinary photograph on the ground. With this primary factor and the multiplying factors of the filters we will find that the required exposure is too long.

To meet this difficulty the Eastman Company has developed a special aëro-filter. This is a light yellow, with a comparatively low multiplying factor, yet, its absorption is such that it gives very satisfactory results in cutting haze. Of course, all such filters must be used in conjunction with panchromatic stock to make use of the published multiplying factors.

There is a filter used in process-work, known as the Æsculin filter. This is a colorless filter used to cut out the ultra-violet light when photographing drawings in which Chinese White has been used. This filter is delicate and unstable in daylight, turning brown after a certain amount of exposure to daylight. However, experiments in telephotography and aërial photography have indicated that this filter is very efficient in cutting haze.

From day to day the use of aërial kinematography grows. The use of the plane by the newsman is already established procedure. There are many events which can be covered from a plane in a manner which could not be equalled from a stationary point. In catastrophes, in natural phenomena such as earthquakes and so forth, and similar occurrences, the plane is invaluable. The use of the plane in war has been proved a success and of military importance.

Another use which should prove profitable to the kinematographer is in photographing real-estate developments and like projects. Such films would be very valuable in sales-campaigns, either in selling real-estate or in stock-sales of development companies. The same would apply to new factories, oil-fields and similar developments.

Not the least important use of the plane in kinematography is in engineering work. In the first place, a comprehensive preliminary survey can be made easily and quickly. This survey will be far more easily understood by officials who have no training in engineering than would the usual survey-maps and blueprints. Later, as actual development goes forward, a series of films could be made which would give the home-officials a graphic record of progress far more valuable than any number of reports.

More and more corporations are turning to aërial surveys before investing any considerable amount of money in development of large tracts of land. After development is definitely decided upon, such a survey is invaluable as an office-record and for reference; but the purely preliminary survey can be made just as successfully, more quickly and with less trouble and expense upon motion-picture film than upon a mosaic paper-print. After the project is approved, the orthodox aërial map can be made; but, if it is turned down, a considerable saving has been made.

Aërial photography is still young and aërial kinematography of still less age; but there seems to be a wonderful future for both. There is no doubt whatever that before this volume acquires its cover that there will be still newer developments. For that reason I have attempted only a brief and generalised survey of this work. As with all young and rapidly developing sciences, the student must follow the progress in paragraphs and individual articles which are available from month to month in technical periodicals.

(To be continued)



What Camera Not to Buy

ERNST D. BLAIR



FOR about seven years I have practiced photography as a hobby and in that time have read fully a dozen articles in various photographic publications on the subject "What Camera To Buy". Realising, therefore, that most amateurs are informed on that subject, it occurred to me that a few comments on what not to buy, as illustrated by my own experience, would not be out of place.

My first camera was an imported vest-pocket, $1\frac{3}{4} \times 2\frac{1}{2}$ with an F/7.7 lens, for plates and film packs. Using the packs I sometimes obtained very good results; at other times, the film would not lie flat, giving fuzzy pictures, again negatives would be fogged in pulling out the tabs, or horizontal scratches would occur. I photographed a very dear relative of mine with this camera, making some half dozen exposures, discovering afterwards that the black paper placed in front of the films had jammed and left the films in their pristine state. Later on, upon her death, which was not a result of my endeavors, it was found that a rather poor snapshot I had made previously was the only likeness of her made in a great many years.

This most exasperating incident and others in a smaller way led me to try plates. Carrying the camera in one pocket and half a dozen loose metal plateholders in another proved to be out of accordance with my idea of the convenience of a vest-pocket camera; and, desiring as well, a camera that would make good-sized pictures without enlargement, I disposed of the small instrument and sent to a photo-shop for a 4×5 plate-camera.

The camera arrived true to the description excepting the fact that the bargain-catalog had not mentioned that the shutter was in a state of coma—all photographers will appreciate what this means. In other words, the shutter would open halfway and then go to sleep, thus making an unlimited time-exposure. As I wanted to be able to make some snapshots, I sent the camera back with a request for money back. The reader knows that I received the money, as my chronicle of woe is not ended.

A more careful examination of catalogs of rare bargains revealed a very fine outfit. This one would last me a lifetime. However, when it came, I saw that it had already had a longer life than myself—I was then fifteen—and presumably, from our comparative appearances, a more useful one. It was a 4×5 plate-camera

with a Goerz lens. The original view-finder and focusing-scale had given way to newcomers, that is to say, they were newcomers to that camera; for if I had not known the history of the art and had taken these attachments for evidence of its age, I would have supposed that photography was a contemporary of the ancient Greek art of sculpture. The camera was thus disabled for handwork, so without much hesitation I decided that a tripod was the appropriate thing.

This camera in spite of its antiquity did faithful work for several years, the excellent lens being its redeeming feature. But the time came when I wanted pictures of little excursions and trips, and of my college-days, and that necessitated a hand-camera. After trying to have an accurate scale and finder fitted by the manufacturer and getting an unsatisfactory job, I sold the old 4×5 , although it was with genuine regret.

My next venture was a $2\frac{1}{4} \times 3\frac{1}{4}$ roll-film camera of American make with an F/6.3 lens. This was to be in my pocket all the time and get all the pictures. These pictures, however, did not seem of quite anastigmatic quality. A search for the trouble showed that the shutter was a trifle loose, and that when I pressed the button the shutter did the rest, to disfigure Mr. Eastman's well-known remark. The camera was not of his manufacture, by the way. A visit to a repair-shop did something to remedy the trouble; but the shutter never was as rigid in the front of the camera as it should have been. One day while out in the midst of some beautiful rural scenery, I had occasion to cross a barb-wire fence. I got to the top and jumped. The camera jumped independently of me and alighted rather firmly on its back on some rocks. The former being of very fragile aluminum, made so to save the camerist half an ounce of weight, it was bent in such a way as to occasionally let in an inquisitive ray of light, which, welcome as it would have been on some of the subjects I essayed, only succeeded in fogging a film every now and then. So camera number three went to Davy Jones' locker, in this case a junk shop.

By this time I had made a good many pictures, some good and some otherwise, and I thought that I knew a little more about cameras. Having read of the great efficiency of the focal-plane shutter, I paid special attention to advertisements of a certain foreign make of focal-plane camera, compact and strong that would be



THE DEVOUT PILGRIM

Courtesy of Foto-Revista

A. MONDELLI

better than a reflex without the latter's bulk. The price I paid for it would almost have bought a farm. It was a 5 x 7 plate-camera with an F/6.8 lens. After using it for some time and getting mediocre results, it became apparent to me, first, that an eight-inch lens has too little depth of focus to be satisfactory for hand-camera work; second, that owing to the narrow design of the camera-body it was wobbly on a tripod; and third, that the direct-vision finder, a lens-type, highly touted in the books, resulted in the near subjects being invariably misplaced on the plate. I also found that a 5 x 7 plateholder, handy as it may be in a studio, cannot be carried in the ordinary coat-pocket, making a case a necessity, and that the camera was decidedly conspicuous. In fact, when I was making a picture of Marshal Foch while he was over here, quite a few spectators in my vicinity almost missed seeing the Marshal, so vigorously were they cheering my camera. I got that picture all right; but I have missed others because of its conspicuous appearance. Lastly, the makers had, not very brilliantly, attached the

handle directly opposite the shutter controls so that they were likely to be damaged easily when the camera was laid down.

The reader by this time probably thinks that I, like the celebrated Englishman, take my pleasures "sadly, or even morbidly". But if he thinks so, he is wrong. Like every real enthusiast, I have enjoyed the hobby immensely, and while my experience with cameras has been rather costly, it has led to the making of pictures which are certainly worth far more to me than the money I have spent on apparatus.

No attempt has been made to enumerate all the troubles which the amateur runs into in his search for *the* camera; but I have tried to show that the amateur's troubles are not all encountered in exposing the plate or in the darkroom. To close, I will say that the beginner will find that a camera which can be examined at hand is better than a dozen in a far-off shop, that manufacturers prefer making their instruments to repairing the same, and that it is easier to buy a camera than to sell it for a fraction of what it costs when it was new.



SALISBURY BEECHES

B. U. JENKINS

HONORABLE MENTION—WILD AND CULTIVATED TREES





EDITORIAL



Photography as Work and Play

THE philosophic editor of Whiting's ever-refreshing column, in the *Boston Herald*, says that playing is doing what you want to do, and work is what you have to do. If we were compelled to play, play would be work. The professional baseball-player works doing the same thing that the boy does at play in the back lot. A city-man puts on old clothes and spends day after day fishing from a boat, or along the edge of a stream, and calls it play. A man who catches fish for a living, does much the same thing and wishes he could get a change.

The practice of photography, however, is not in the same category. Most professionals, even when some of them find it hard to make both ends meet, seem to be content with their calling, which offers more variety than many another. It were better, though, if some professional workers could have had some good business-training; then they might be more prosperous. Many work harder than would seem necessary. Many spend their evenings in the darkroom, and not a few ignore the importance of a winning personality and a pleasing appearance. Is there a school where these things may be acquired?

While most professionals really enjoy their work, profitable or otherwise, the amateur workers are enthusiasts. When, after a long period of enjoying the pursuit, the amateur puts his camera away not to be used again, he shows poor judgment. He is losing something of value in life. We know of such individuals and are sorry for them. We have induced several of them to join local camera-clubs, where their waning interest has been revived. They are participating in the exhibitions and even in the monthly outings. One old camerist took up golf two years ago, at the expense of photography. Finding the sport too strenuous, he has forsaken it—by the advice of his physician—and is now motoring with his camera. He has recently taken up the gum-process and talks of sending several prints to the Pittsburgh Salon. We rather think that they will be accepted.

Yes; camera-work is the hobby *par excellence*. Thanks to its infinite variety, numerous possibilities, and the pleasure it gives to the worker, his friends, and the public, photography makes its appeal to the lover of what is visually beautiful and soulfully stirring.

Photographs for Christmas

THE desirability of utilising enlarged prints from one's own negatives as Christmas-gifts has been suggested on this page many times during the past twenty years. During that time, we have been gratified to hear that pictures used for this purpose have been a source of continual enjoyment to the recipients and, incidentally, have reflected much credit on the artistic skill and taste of the donors. There is no doubt that the pictures served to advance the cause of pictorial photography, and to stimulate the sale of cameras as well.

On the other hand, instances have come to our attention in which the photographer did not exercise the best judgment in the selection of the subject, or put into the print the best that was in him. Consequently, the recipient was unable to enjoy it or proudly to show it to his friends. At the beginning, the camerist is generally attracted by a theme that makes a personal appeal to him, and the result excels in proportion to his innate sense of beauty and his knowledge of the principles of pictorial composition. Such a picture may please some persons, and others not at all. It may be well, therefore, if the pictorial worker could predetermine the preference or taste of the person he intends to favor, and to obviate possible regrets.

Is the picture to be a genre, a marine, a landscape, or a rural scene? It has happened that a critical visitor, noticing the donated picture displayed in the home of the recipient ventured to criticise it; and justly, too. After that, the picture naturally ceased to be a source of pure enjoyment to the owner, who had been made to see flaws in composition or technique he had not before noticed. The artistic reputation of the donor also suffered thereafter. May not this serve as a suggestion to the pictorial worker about to play the rôle of Santa Claus?



This page would not be complete, were we to forget to extend to our readers and friends a hearty Christmas-greeting. The year just passed may record many desires that remain unfulfilled; but we ought to remember that blessings often come to us in disguise.



ADVANCED COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value \$10.00.
Second Prize: Value \$5.00.
Third Prize: Value \$3.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already subscribers, or have been subscribers*, will receive a credit of \$1.00 toward the purchase of any standard photographic textbook, this credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes may be chosen by the winners, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, suitably engraved.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

All competition-pictures not returned are used to make up the PHOTO-ERA PICTURE EXHIBIT which is sent to schools, libraries, museums, camera clubs and to responsible organisations for exhibition-purposes, *free of cost*.

Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. Not more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered into competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

3. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. Prints may be mounted or unmounted.

4. Each print must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer, and printing-process. Enclose return-postage. Data-blanks sent at request.

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he shall have received official recognition.

6. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces is sent with data. Criticism at request.

7. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

8. Competitors who have won three first prizes within a twelvemonth become ineligible to compete for prizes in this competition for *one year* thereafter.

Awards—Advanced Competition

Subject—Wild and Cultivated Trees

Closed September 30, 1925

First Prize: J. Herbert Saunders.

Second Prize: S. B. Buckner, Jr.

Third Prize: Franklin Gray McIntosh.

Honorable Mention: Louis V. H. Albers; A. Caskey; Ernest M. Child; L. J. Creegan; Mrs. Martha Curry; F. S. Dellenbaugh, Jr.; F. H. Foster; S. Hirano; Major E. L. Hooper; Duane P. Hotchkiss; B. W. Jenkins; U. Stephen Johnson; Walter Keiser; Hiromu Kira; Dr. K. Koike; R. Morita; Edward D. Mudge; Melvin C. Parrish; Michael J. Pecora; Chas. T. Ramsden; Frank Lee Rogers; Walter Rutherford; John O. Scudder; Kenneth D. Smith; L. J. Wilson.



Subjects for Competition—1926

"My Home." Closes January 31.

"Miscellaneous." Closes February 28.

"Indoor-Genres." Closes March 31.

"Table-Top Photography." Closes April 30.

"Artificial Light Photographs." Closes May 31.

"Miscellaneous." Closes June 30.

"Pictures of Children." Closes July 31.

"Real Sunrise and Sunset Pictures." August 31.

"Wild Flowers." Closes September 30.

"Miscellaneous." Closes October 31.

"Lakes, Rivers and Brooks." Closes November 30.

"Interesting People and Places." Closes Dec. 31.

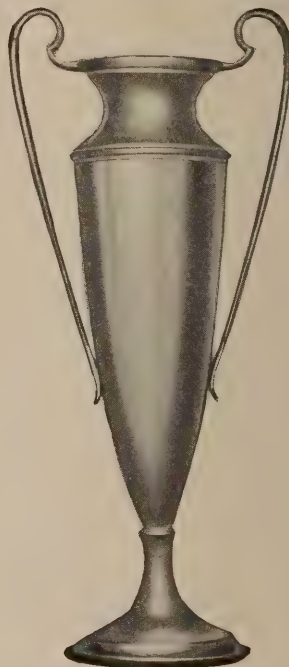


Photo-Era Prize-Cup



BEECH-TREES—AUTUMN

J. HERBERT SAUNDERS

FIRST-PRIZE—WILD AND CULTIVATED TREES



SENTINEL OF THE HEIGHTS

S. B. BUCKNER, JR.

SECOND PRIZE—WILD AND CULTIVATED TREES

Advanced Competition

ALTHOUGH trees are not responsive to the demands of the pictorialist in the same degree as are animals, they lend themselves admirably to the scheme of the artist. The camerist who is a nature-lover, understands their moods, how they yield to the influence of atmospheric conditions, to sunshine, rain and storms. The present competition, "Wild and Cultivated Trees", offered unlimited opportunities to the picture-maker familiar with the physical appearance and behavior of trees in the woods, in the open, isolated on the rocky shore or in the desert plain. These opportunities were utilised in an admirable manner by a large per cent. of the contestants. The intelligence, the sympathy that they have evidenced in their pictorial efforts have been very gratifying to the Editors and to the members of the Jury as well. To be sure, there were not a few who contented themselves with making mere records, and in their efforts some of them expended much time and energy. What they achieved may have satisfied them, but did not meet the requirements of the competition. This is nothing new. He who enters one of the competitions, such as PHOTO-ERA MAGAZINE conducts, in the spirit of genuine enthusiasm—*con amore*—studies the subject, its possibilities and different aspects, and is willing to give it the time and attention it deserves, provided, naturally, that he has the necessary artistic and technical equipment, is the one who achieves something worthy of his efforts and pictorial photography.

"Beech-Trees—Autumn", on the preceding page, is a case in point. A greater camera-enthusiast than its author, J. Herbert Saunders, it would be hard to find anywhere. He seems to enter into his subjects

with heart and soul, and the result is always gratifying. Despite a few minor deficiencies of his picture, the Jury perceived the artistic intent, and the sympathetic treatment of the theme. The contrast of light and shade is strongly marked, and with the resulting vigor comes a boldness of expression that is compelling. The artist may have visited this locality before, without, perhaps, being inclined to devote an exposure to what he beheld. Revisiting the woods, when the presence of haze gave an air of mystery to the place, he saw the picture he had anticipated. His knowledge of composition came into play and the result is an animated, well-balanced and individual creation. One admires the long scale, and numerous planes; the luminous quality and stereoscopic effect. The character of the trees is clearly indicated and there is no doubt as to the singleness and simplicity of pictorial design.

Data: Roundhay Park, Leeds; October morning; misty; $3\frac{1}{4} \times 2\frac{1}{4}$ Reflex camera; $5\frac{1}{4}$ inch Anastigmat; at F/8; $\frac{1}{2}$ seconds; Kodak Film Pack; Metol; bromide enlargement.

"Sentinel of the Heights" represents a typical, wind-twisted pine seen so often in mountain regions or along the Pacific Coast where isolated trees are exposed to the elements. Here, tempestuous winds have played merrily with the poor little tree and bent it quite out of shape. Nevertheless, the top with its easily counted branches tries bravely to maintain itself and would, if it could, relate its varied experiences to the interested beholder. The artist, doubtless touched and impressed by the Sentinel's obviously sad appearance, embraced the opportunity to create a picture that would tell its story to a receptive spectator. The barrenness of the

place, devoid, as it is, of all human habitation or of plant- or animal-life, even sunshine is absent, has been interpreted with true, artistic feeling.

Data: August, dull light; drizzling rain; Plaubel Makina Vestpocket camera; F/3 Anticomar Lens; stop, F/4.5; 1-10 second; Agfa Film Pack; pyro; print, Charcoal Black from enlarged paper-negative.

Although the locality pictured by Mr. McIntosh is a desert, it is doubtless familiar with the sound of human voices. Pioneers of 1848 may have traversed these desolate places; they may have even halted and rested here. The camerist, however, who recently ventured to invade its stillness had an eye for the picturesque and, though his means were simple, he produced an eminently pleasing picture. The critical observer

ciated than is the case today. Quantity and speed of production are features of present-day photography which have unfortunately blurred the sense of pride which formerly existed in the making of prints which should last as long as possible. Even so, a good deal of loose thought is prevalent nowadays respecting this question of permanence. It is sometimes suggested that a printing-process deserves to be included among those yielding permanent prints because it is possible to point to prints which have lasted ten, twenty, or thirty years. Yet, in fact, that is not the point at all. So far as permanence is concerned, a printing-process must stand or fall by the lasting qualities of the average output, including the worst as well as the best which is sold to the public. When the question is regarded



DESERT-TREE

FRANKLIN GRAY MCINTOSH

THIRD PRIZE—WILD AND CULTIVATED TREES

appreciates the value of gradation as a means of balance. The bush-like tree has been judiciously placed in low-lying hills, at the left. Had this slight elevation been bathed in sunlight or had it been in an otherwise high key, it might not have sufficed to serve as a needed balance in the picture. Fortunately the clouded sky assists very materially in supplying this pictorial need, and combines with the landscape to form an harmonious whole.

March afternoon; fair light; $3\frac{1}{4} \times 4\frac{1}{4}$ Graflex; $5\frac{1}{2}$ -inch Kodak Anastigmat; stop, F/8; 1-25 second; Eastman roll-film; pyro.

WILFRED A. FRENCH.

Permanence in Prints

Too little importance is attached nowadays to the question of the permanence of photographs, remarks a writer in *The British Journal*. It was a question much more in the minds of those of the past generation, to whom the fading of print-out silver-prints was a sore trial and by whom the permanence of platinotype or carbon-prints was very much more greatly appre-

ciated than is the case today. Quantity and speed of production are features of present-day photography which have unfortunately blurred the sense of pride which formerly existed in the making of prints which should last as long as possible. Even so, a good deal of loose thought is prevalent nowadays respecting this question of permanence. It is sometimes suggested that a printing-process deserves to be included among those yielding permanent prints because it is possible to point to prints which have lasted ten, twenty, or thirty years. Yet, in fact, that is not the point at all. So far as permanence is concerned, a printing-process must stand or fall by the lasting qualities of the average output, including the worst as well as the best which is sold to the public. When the question is regarded



SUBJECT FOR NEXT COMPETITION ADVANCED WORKERS



CHRISTMAS-EVE

ELSA B. VERSFELT

Advanced Competition—My Home Closes January 31, 1926.

WHAT does your home mean to you? Whether it be a palace or a cabin, is it home? Is it the place where the richest and most beautiful experiences of your life occur? Is it where happiness and contentment may always be found, where loved ones minister to your needs and understand when things go wrong in the world outside? Perhaps, your home is just one room; but to you, it may be all that a mansion is to another. Or do you know of a "home" to which those who live in it dread to return at the end of the day? Yes, there are several kinds of homes. However, let us try to photograph as many happy ones as we possibly can.

By photographing homes for this competition, I mean to select whatever there is about your home

which seems to you to have the strongest appeal. Is it the exterior, the cosy living-room, the children's playroom, the flower-garden about the house, the music-room, the big easy chair near the reading-lamp, the attractive piazza or sun-parlor or perhaps the dining-room? In short, were I to ask you to send me a picture of your home which would portray that which you loved best about it, what would you send? I have lived in palatial homes; and I have known what it means to climb four long flights of stairs to a small hall-bedroom on the top floor of a brown-stone front boarding-house in New York. Whether the present home of my reader is a mansion, cosy cottage or hall-bedroom, let him try to portray with his camera that which to him is most attractive about his home or the place that is home to him.

A. H. BEARDSLEY.



BEGINNERS' COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value \$5.00.

Second Prize: Value \$2.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already subscribers, or have been subscribers*, will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes, chosen by the winner, will be awarded in photo-materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

Rules

1. This competition is open only to beginners of limited experience with practical camera-activity, and whose work submitted here is without any practical help from friend or professional expert.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints and enlargements up to and including 8 x 10 inches.

4. Prints representing no more than *two* different subjects, for any one competition, and printed in any medium except blue-print, may be entered. Prints may be mounted or unmounted, as desired. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

5. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail.

6. Each print entered must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent at request. Criticism at request.

7. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he has received official recognition.

8. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with data.

9. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

Awards—Beginners' Competition

Subject—Miscellaneous

Closed September 30, 1925

First Prize: R. Sawaji.

Second Prize: Godfrey Priestler.

Honorable Mention: Miss Jean Goldsmith.

Now for the Beginners of 1926

ALTHOUGH every detail is not yet worked out, it is possible to say, at this time, that the January, 1926, issue will have some changes. One of them will be with regard to this department. The beginner rightly deserves greater consideration and more space, and he is going to get it. Right here, let it be understood that every beginner, young or old, will be entitled to the best service that PHOTO-ERA MAGAZINE can offer. By service, I refer to answering questions, making suggestions, co-operating in the matter of selecting photographic apparatus, criticising prints when requested and doing whatever can be done to help every beginner make a success of photography. The great increase in correspondence during the past few months seems to testify that we have been able to do something to help our readers enjoy their photographic work and get good results.

This department will be enlarged to include more material especially selected for the beginner. Also, we hope that beginners will write in often and give accounts of their experiences for the benefit of all. No matter how trivial a certain incident may be; who knows, it might be of great value to some one who was just beginning. For example, let us suppose that one reader uses a color-screen for the first time, has some trouble with it, but finally masters it successfully. Would not the account of his experience be very helpful to some one else who was going to use a color-screen for the first time? The exchange of experiences among those who are really interested in one subject, and thus banded together, is invaluable. Not only is practical information obtained; but a certain comradeship is established which is really vital to the growth and prosperity of any organisation or group.

It is hoped that every reader of PHOTO-ERA MAGAZINE who is a beginner, and those who are advanced amateurs, will lend a helping hand to make this department a source of practical help, good will and splendid comradeship. It will all be informal, just a friendly get-together monthly meeting for beginners and their friends. There will be no cut-and-dried procedure, announcements or rules for the material in this department. Let all contribute for the benefit and pleasure of all, just as they would do were we all seated together in a cosy club-room. Some material will be formal and some with a bit of humor; but whatever it is, each item will be selected for its practical or inspirational value to the beginner. There is a great need for just this help, and encouragement for the beginner, and PHOTO-ERA MAGAZINE, with its editor and publisher, has decided to make a sincere attempt to meet it during the coming year.

A. H. BEARDSLEY.



THE SETTING SUN

R. SAWAJI

FIRST PRIZE—BEGINNERS' COMPETITION

Beginners' Competition

ALTHOUGH the Japanese who takes up photography as a serious pastime, even without a knowledge of pictorial composition, is a beginner, he almost immediately shows that he is an artist. Why? Because he is an artist by instinct, intuition, nature—call it what you like. I dare say that the intelligent observer who has traveled in Japan, will concur in this opinion. This preamble leads directly to the consideration of "The Setting Sun", by R. Sawaji, which adorns this page. As for myself, I frankly confess that I have surrendered to the charm of this little masterpiece of pictorial photography which I regard in the light of a work of art. A feeling of mystery seems to pervade this aquatic scene. This feeling may yield to one of solemnity—even of sadness, if the beholder happens to be depressed in spirit at the time. But then, seriousness seems to be a characteristic mood of the Japanese, and nearly all of their beautiful work in photography that has come to my attention has been distinguished by this quality. Of course, the feeling of approaching night in Mr. Sawaji's sunset may have been enhanced by a little overprinting. Not having witnessed a sunset on the Pacific Coast, I am not prepared to comment

on the tonal value of the print of which the present halftone is a faithful reproduction. As to the composition of what many may at first regard as a moonlight-scene, I feel that what appears to be the bow of a craft, at the right, is several degrees too prominent. As a balance to the boat in the foreground, it seems overpowering. Some other suitable, but smaller and, perhaps, less distinct object would serve this purpose better. The management—though very indirect—of the reflections is very happy, as it is secondary in importance to the source of light above. The division of sky and water is very judicious in the circumstances. Whether the print, as a whole, is in too low a key, I am unable to determine.

Data: Made near Seattle, Wash.; August, 7 P.M.; $3\frac{1}{4} \times 4\frac{1}{4}$ Graflex; F/4.5 Zeiss lens; used at full opening; 1-25 second; film; M. Q.; bromide enlargement.

"Reflections", by Godfrey Priester, is extremely attractive. How much the boat adds to the beauty of the scene! The observer, critically inclined, may wish that it were placed farther to the left or to the right. If he does, he will find it hard to select a spot better than the present one. Being the most conspicuous object in the picture, it might suggest a more appropriate title than the present one. The reflections

appear to be too clearly defined to pass as an artistic feature of the view. Being so much farther away from the eye of the spectator than is the boat, the central reflection ought to be subordinated, and the others likewise. The camerist was wise to select a time when the reflected sky included clouds, although none appear in the part near the horizon. On the whole, Mr. Priester, an able technician, has done remarkably well, evincing a creditable understanding of balance in composition and, certainly, a discriminating eye in the selection of an attractive camera-subject.

Data: September 16, 8 A.M.; exposure made against the light; Hauff "Flandrin" plate; Hauff Metol; Carl Zeiss Tessar F/4.5; stop, F/8; yellow screen; 1½ seconds; Velox print; Velox developer.

WILFRED A. FRENCH.

Do this several times in fresh spots upon the glass until just enough color remains in the brush to make a small dot. Holding the brush perpendicularly a single touch is then made covering the spot in the negative or upon the print. If this does not cover, other similar dots, to fill in the area, are added; but not blended together. When these are dry, further work can be done filling the intervening spaces and completing the job; but any attempt to paint over a sizable spot at the first application is what invites the trouble. In such a case, most of the color applied will inevitably be drawn from the center and form a ring around the edges, the only remedy for which is to remove all color and begin again.

Opaque is useful to spot the negative or watercolor if desired, say, ivory black; but for the print the require-



REFLECTIONS

GODFREY PRIESTER

SECOND PRIZE—BEGINNERS' COMPETITION

Concerning Pinholes

TRANSPARENT pinholes and similar defects in the negative cause a blemish on the print which must be corrected; but, like other work or alterations made upon the original, it should constitute a real improvement and not become too obvious to the beholder. Pinholes that are tiny may frequently pass unnoticed, in small contact prints; but when such a negative is used to make enlarged prints, the hole in the stocking becomes conspicuous, as will also all other defects in the negative.

The usual procedure is to spot out upon the negative all transparent holes which print black and the resulting white spots which then appear upon the print are in turn treated in a like manner. This is done because it is easier to modify a white spot on the print than to remove a black one. If this in practice has not proved as simple as it looks, try again.

Take a small, No. 1 camel-hair brush and fill with color. Then upon a sheet of glass or something similar draw the brush, with a circular motion, to a fine point.

ments call for spotting that corresponds in depth of tone and color with the adjacent or surrounding portion of the print. The more perfectly the colors are matched the better the result. Regular spotting-colors furnished by dealers usually consist of a set of at least three, black, white and sepia, with which the exact shade is obtained by mixing in the right proportions. Much the same can be done with good watercolors, if these happen to be more available.

Unless one is blessed with exceptionally good eyes, a glass of some kind is a great help. A reading-glass is commonly used; but a folding, pocket magnifying-glass for this and many other uses is something of a real treasure.

CHARLES A. HARRIS.

Not Photographs—surely

DAUGHTER—"What did the specialist say about Auntie's frightful attack of kleptomania?"

Mother—"He said she must take things more quietly in the future."



OUR CONTRIBUTING CRITICS



ROSE-STUDY

EDGAR B. SMITH

THE PICTURE CRITICISED THIS MONTH

Whoever sends the best criticism (not over 200 words) before the last day of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

A FLOWER-STUDY—like the *étude* of our musical friends—implies the practice of particular and technical execution. Especially is this true of the rose, whose surpassing beauty lies in the delicacy and quantity of its color-gradations. Since these cannot be reproduced, color-effects must be achieved by tone-gradations.

This calls for technique of a high order, involving a correctness of exposure adequate to render texture in both flower and leaf, and a sense of tone-relationships which makes for beauty and gives an appearance of Nature—the true function of a picture.

Mr. Smith's effort, although pleasing in many respects, lacks the subtle distinctions of high excellence. Inadequate exposure, faulty lighting, com-

position-defects and an obtrusive background contribute to a hit-and-miss distribution of high and low tone-values, which is unreal, disturbing, inharmonious.

Reconstructive criticism suggests a reduction of tonal-contrast to the minimum, effected by improvement in illumination and background; a broader lighting so directed as to avoid reflections and the casting of dark shadows; a uniform background of a soft gray tone, relieved only in its lighting, receding and acting only as a foil; better subject-material—free of evidences of clipping—and an arrangement of same according to natural growth.

Correct exposure will then give the animation and daintiness desirable in a rose-study.

J. W. ADAIR.



Unbalanced composition is the first point to be considered in a criticism of Mr. Smith's "Rose-Study". The flower in the lower right-hand corner could well have been excluded as one can note by placing a piece



HELL POND, CAMP DEVENS, MASS.

E. J. ESCOPAS

YOUR CRITICISM IS INVITED

of paper over this part; in fact, were it entirely omitted the print would be greatly improved.

Evidently a suitable filter was not used, for had it been, the tone-gradations of the greens on the leaves and stems would have been more pleasing. The darkness of the greens offers too much contrast to the whiteness of the blossom.

The partially opened bud is well lighted and composed and one would like to see a study of this one bud and stem alone.

The uppermost blossom is not placed well; could it have been tipped toward the camera (as is the bud) it would have been more effective.

I am inclined to believe that the picture was under-exposed and that perhaps no ortho or panchromatic film or plate was used, as the whole effect is too contrasty and harsh.

L. G. WELLS.



Mr. Smith's print entitled "Rose-Study" has many commendable features. The background is well chosen and of such a nature that the white roses are thrown into relief. As the lighting and exposure have been wisely planned the leaves are subdued in tone and, therefore, do not compete in interest with the principal subject—the roses.

Nevertheless, we find several defects which command our attention. One feature is particularly noticeable—the lack of a central point of interest. The eye does not voluntarily rest upon a single portion of the print for any length of time, due to the fact that the three roses are individually clamoring for attention, so to speak—the gaze flittingly leaps from one to the other. The three separate elements are pulling in opposite directions which is very destructive to the unity of the whole. Another natural result is the production of a restless sensation which, I believe, the photographer had no intention to suggest. In a word, too much has been included in the picture.

Photograph one of the roses separately and see whether the "study" is not improved. Then, you will doubtlessly have an intimate view showing detail clearly enough to delight a botanist and at the same time a simplified composition with an improved unity of purpose and containing, to a greater degree, that symmetry so dear to the hearts of pictorial workers.

ARTHUR L. MARBLE.



A Dollar Tripod

DON'T you hate to have a friend get the best of you in finding a bargain, then have him come around to you and "rub it in"? A couple of years ago I picked up an Engineer Corps Graflex tripod for what I considered a wonderful bargain—\$2.95. A friend saw mine, asked where I had purchased it, went there, found that they were being closed out, and bought one for a dollar. No doubt this lot has been sold out by now, so I won't be accused of advertising it.

This tripod is very handy for occasional use with a heavy graflex, for it is only about three feet in height; but I use mine quite often with a view-camera, and with a tilting-top it is very useful to photograph small objects, or to do copying, with the camera in a vertical position. The tripod is so heavy and rigid that one can sit on it without straining it or noticing any tendency to wobble.

Although a heavy tripod is a nuisance, I remember one time when I was glad to have one in hand on a long hike. Coming home one night with camera-case in one hand, folded tripod in the other, a stranger stepped out in front of me on a dark block and asked what time it was. Instead of pulling out my watch I fell back a pace or two and told him it was just about ten o'clock. Whether he took the tripod for a club, I cannot say; but he thanked me and passed on, and I still have that old watch. Maybe he was honest. Quien sabe?

PERRY D. FRAZER.



OUR ILLUSTRATIONS

WILFRED A. FRENCH



OUR readers, including new workers eager to picture the snow-covered landscape, will welcome this issue, because it is partly devoted to that seasonable subject. The initial illustration—frontispiece and cover—represents a typical winter-scene; but where, the camerist has neglected to state. It is probably somewhere in New England. The worker was doubtless interested in the foreground as an important feature in his pictorial scheme. It is well that he shows the bushes in their entirety, for many an amateur would be tempted to eliminate their base and, incidentally, omit the monotonous area, nearly an inch wide, which constitutes the immediate foreground and stretches from one side of the picture to the other. With a similar horizontal band of snow, right above it, although varied by intersecting bushes, and two more farther away from the observer—a very broad stretch and a narrow one just beyond, near the horizon—the picture threatens to become wearisome, were it not for the numerous trees and bushes which partly conceal them from view. Human and animal interest is present in the form of a horse-drawn vehicle, and the building in the center of the picture suggests human habitation. The large, deciduous tree, in the foreground, is the principal object here, and with the barn and the group below it forms a somewhat crowded mass. Were they placed farther from each other—the result of a different viewpoint, perhaps—the composition might be better than it is. The disappearing sun, fortunately, gives a touch of beauty to the somber sky and a ray of cheer to the declining December day. Mr. Tracey is to be commended for the amount of thought and effort he has given to create a picture that appeals to the imagination of the spectator.

Data: December, dull light; 1A Special Kodak fitted with Kodak Anastigmat; stop, F/6; 1/25 second; Kodak roll-film; pyro; print, P. M. C. No. 1 Contrast.

A member of the Union Camera Club of Boston, Raymond E. Hanson, who has produced a large number of winter-landscapes, each a masterpiece of pictorial composition and scenic beauty, remarked, recently, that to convert a snowscape into an attractive picture required an observant and critical eye, also much patience and physical effort. That is obviously correct. But if he were to tramp through mountain-regions, equipment in hand, in search of artistic subjects, as Mr. Emmens has, he might find his task very arduous and exhausting, and subjects of the kind that would appeal to him, not so numerous as nearer home. The examples of winter-photography that accompany Mr. Emmens' instructive and entertaining article—pages 305 to 307—reflect the author's sense of beauty, critical discernment and technical skill. In looking at Mr. Emmens' illustrations, the discriminating beholder will derive the most satisfaction when he comes to "The King's Highway", with its pleasing structure and transparent, well-placed shadows, and "Silver-Cup Peak", artistically arranged and skilfully photographed. Data will be found in the article.

"The Hawthorns in September", page 308, shows that the photographer has an eye for artistic arrangement. He has chosen a pleasing field of flowers for his

foreground, thereby enhancing the beauty of his group of hawthorn-trees. No data.

The motto, "Say it with Photographs", is a trite one; nevertheless, it is appropriate and timely, if the reader will adopt Mr. Jones's suggestion, as illustrated on pages 311 to 313. It is a happy and practical variation of an idea similar to several described in this magazine during the past few years.

Comparisons are said to be odious. All the same, I cannot refrain from recalling the recent, and successful experience of Mr. A. H. Beardsley as a beginner, as related by him, and illustrated with aerial photographs made by him on his maiden-trip, in the November issue, 1925. Then, I read the story of another photo-aerial novice, published in this issue, and note how well he, too, has succeeded. His technical difficulties are about the same as those encountered by our Publisher, but told in a different, although extremely interesting way. Several of his pictures, on pages 316 and 319 impress one as being eminently satisfactory, and complimentary to his courage, coolness and photographic skill.

As we all are interested to see what our friends in Argentina are doing photographically, we are enabled to look upon a scene that is reminiscent of old Spain, page 331. A journeying monk has just descended from his faithful mount and is offering his devotions to a wayside shrine. The spirit of this simple, religious ceremony has been admirably interpreted by the photographer, A. Mondelli. In the language of the movie cameraman, it is a "close-up". Sorry; but I should like the picture better had the camerist stood farther back. Then, too, the pilgrim's hand, white hat and tassel irritate my artistic feelings by being in so high a key, as they are the only highlights, with the exception of the donkey's nose, in the picture. Unless the hat have some special significance, it were better if it could be lowered in tone and become a less conspicuous and disturbing object, although its importance as an accessory cannot be denied. The treatment of the shrine and the background is admirable.

Honorable Mention

THE "Wild and Cultivated Trees" competition was highly successful in point of quantity and quality of the entries. By consulting the list of names of participants who won Honorable Mention, page 334, the regular reader will recognise the names of not a few eminent pictorialists. Among them are two whose successful prints have been reproduced in this issue.

"The Elms", page 328, is an unique, attractive, and well-balanced composition. This means that sky and foreground, in their pictorial relation to each other, have also been treated with artistic discretion. If the artist, Mr. Johnson, could have contrived, by some legitimate means—in focusing, perhaps—to give the middle tree less prominence, that object would improve the entire picture. At present, it is just as distinct, in all detail, and of the same tonality, as the tree nearest to the observer, and in an artistic sense that is not right. As a piece of realistic photography, and as a pleasing pattern, "The Elms" is faultless.

Data: Made in Pittsfield, Mass.; July 26; 9.45 A.M.; bright sunlight; 5 x 7 view-camera; Turner-Reich Series II, F/6.8, lens; used at full opening; 8-time filter; 1/5 second; Standard Orthonon plate; pyro; print, Defender Professional No. 9 Rough.

"Salisbury Beeches" greets us fervently, lovingly. It is good to look upon these sturdy beech-trees as they appear in old England where they assume an individuality that may be associated with the doughty English race now facing problems and difficulties which, in national importance, are unequalled in the history of the country. Whether the artist of the impressive group, on page 332, will subscribe to these frankly expressed sentiments of mine, I am in no position to say; but it seems to me that, unconsciously or designedly, he has given a portrayal of one of England's noblest trees that symbolises an outstanding national characteristic of a people which may soon be fighting for its very existence.

Data: Made at Salisbury, England; August, 1922; bright light; IA Special Kodak ($2\frac{1}{2} \times 4\frac{1}{4}$); 2B Tessar lens; stop, F/22; 1/10 second; Eastman roll-film; hydro; print, Eastman Royal Bromide.



ALTHOUGH "Christmas-Eve", page 338, appeared in PHOTO ERA as recently as last April, it is shown as an example worthy of emulation in "My Home" competition which closes January 31, 1926. Those who are interested in Elsa B. Versfelt's interpretation are referred to page 220, April, 1925, issue, where will be found my criticism, and the data.

Picturing a Popular Subject

As mentioned on the Editorial page of this issue, the observant camerist may notice an attractive pictorial theme created after a heavy fall of snow, *viz.*, a line of human footprints—straight or irregular. As this subject has attracted the fire of many picture-makers every year, since the beginning of amateur-photography, it has naturally become hackneyed. But this is no reason that it should be passed by. The only possible objection seems to be that, in view of the innumerable repetitions of its portrayal, this delightful and typical winter-scene is apt to suffer from repeatedly mediocre or conventional treatment, although it has been masterfully interpreted not a few times, as the pages of this magazine will testify. Those workers who are ambitious to do credit to their skill, and to the art of photography, may find it worth while to consult certain back issues of PHOTO-ERA and—to use the expression applied to the once popular autograph-album—

"Turn these pages o'er and o'er,
To see what others have writ before."

Some camerists may be content to imitate, as well as they can, some excellent example, without knowing, however, that the original may have been seen and admired by many others including, perhaps, those who are called upon to pass judgment upon the representation of the plagiarised theme. In these days of enlightenment, it ought not to be difficult to understand and to apply the principles of composition and chiaroscuro, and even to improve upon pictures which, years ago, were regarded as faultless. Such a subject as footprints in the snow, whether human or animal, is capable of being portrayed in many different ways, most effectively, however, when

the sun of early morning or late afternoon casts lengthening shadows across the pedal crevices and neighboring objects—fences, rocks or trees. Another striking effect is produced by the mysterious light of the moon, the rays of a nocturnal camp-fire, or of artificial light. To this is added individuality of treatment, so that it is possible for a truly artistic, imaginative and resourceful worker to surpass a masterpiece that has adorned PHOTO-ERA when amateur-photography was young.

To facilitate the quest of reproductions, in past issues, of admirable portrayals of tracks in the snow, I herewith give a short list—the result of a hasty, at-random examination of several bound volumes:—"Snowshoe-Tracks", Dwight F. Boyden, June, 1909, and repeated in February, 1919; "Evening Light on Wet Snow", Robert E. Weeks, February, 1909; "Sunlight on the Snow", William Spanton, and "A Fresh-Broken Trail", Elgin Lessley, July, 1910; "A Winter-Landscape", W. Mizunuma, May, 1912; "Woods in Winter", R. A. Dowd, June, 1912; "A Country-Road", Will G. Helwig, April, 1915; "An Aspen-Trail in Winter", Elliott Hughes Wendell, June, 1918; "Winter-Sport", Alexander Murray, June, 1919; "In Winter's Grasp", Rupert Bridge, January, 1920; "November", F. H. Rodgers, March, 1920.

Guild of Photographers

THERE is an almost mediæval atmosphere about the Society of Arts and Crafts of Boston—a society of artist-craftsmen banded together for the purpose of marketing their work—in that it is composed of guilds of the various arts, by no means the least of which being the Guild of Photographers, as will at once be recognised when it is learned that among its members are such well-known pictorialists as George S. Akasu, Col. James M. Andrews, Dr. Coomaraswamy, Raymond E. Hanson, Dorothy Jarvis, Sophie Lauffer, Francis O. Libby, Ralph Osborne, W. H. C. Pillsbury (Dean of the Guild), Sara Knapp Russell, Gustav H. Seelig, Herbert B. Turner, Bertrand H. Wentworth, F. R. Fraprie, F. R. P. S. and many others.

The first meeting of the Guild of Photographers, of the winter-season, was held November 10, at the beautiful new home of Col. James M. Andrews, Godard Avenue, Brookline. At these meetings, one of the regular features is the criticism of prints brought by the members for the purpose. Here they receive kindly and helpful criticism by a competent critic, and are generally discussed by the members of the Guild. After the meeting, Colonel Andrews showed upon the screen about one hundred of his color-photographs of a wide range of subjects from New England to the West Indies, from floral decorations to marines, all of which were made with rare attention to pictorial composition as well as technique. The Guild-members were given an admirable opportunity to study the various merits and demerits of the Lumière Autochrome plates as compared with the color-plates made by Agfa, as Colonel Andrews showed the same subject first made on one plate and then on the other. The meeting, in common with all the Guild-meetings, ended after a delicious supper had been served.

A Lugubrious Designation

THE data which accompany prints sent to PHOTO-ERA competitions often contain names of foreign lenses together with the corresponding focal lengths in centimeters. I was greatly amused, therefore, when I received a print recently, with data that contained the following item, "Hekla lens, $12\frac{1}{2}$ cemeteries"!



ON THE GROUNDGLASS

WILFRED A. FRENCH



Reclaiming Failures in Exposure

LOOKING over the results of a summer's work shown me by a camerist, introduced to me at the Boston Art Club, recently, I was amazed when he told me that fifty per cent. of his snapshots were complete failures. At my urgent request, he showed me the negatives, though somewhat reluctantly. Examining each one carefully, I found many double-exposures, some under-exposures, and not a few over-exposures (made with camera resting on some convenient, firm base). Asked what he intended to do with the package of failures, the camerist replied, "Throw them away, of course," although he added that he would gladly give fifty dollars if the double-exposures could be saved. I told him to keep them for a while until I could obtain the address of a man (a photo-finisher) whom I met in London, at Houghton's, last May, who made a specialty of saving faulty exposures including "two negatives on one film"! He declined to tell me how he worked the last-named trick; but I fancy that it is a system of intensification and blocking out the subject to be saved. He said that in most cases he succeeded in reclaiming one of the double-exposures and, in one very important instance, he actually saved *both*—but he added, "my price was two guineas each, four guineas for both, and gladly paid."

Now, I suppose, what an English photo-specialist can do, can be done successfully by his American fellow. If this idea, of saving double-exposures, should be new to us, over here, it is for skilful photo-finishers in this country to take it up. And they can make it profitable, too.

A Hint in Composition

WHILE at Durham, England—famous for its great Norman cathedral—last spring, I observed a camerist who was standing not far from the western Bank of the river Wear and making a snapshot of the grand edifice towering high above the opposite bank. Instead of holding his camera so as to bring the imposing object near the top of the picture he coveted, he pointed it decidedly upwards, thus placing the great building too low in the picture-space, thereby sacrificing the effect of height which must have impressed him. As I happened to be near the snapshooter, I ventured to explain to him the result of the exposure he had just made. At my suggestion, he consented to make another in which he held the instrument directly ahead—*without tilting it upwards*. He was sufficiently interested to ask for my address, offering to send me a print of each. The two prints arrived—would you believe it?—on my birthday, September 17! The print from the exposure made first was marked, on the back, "Unsuccessful"; whereas the other (made from the second exposure) was labeled, "Just right!"

Her Most Precious Possession

YOUNG girl (pleading): "Oh, Mr. Holdup-man! Keep my purse and rings, but give me back my powder-puff and mirror!"

Expansion and Contraction

WHILE luncheoning at an old farm-house that served as a temporary wayside inn, in northern New Hampshire, last summer, I noticed signs of rapid disintegration. In the room that served as office, lounge and reading-room, I observed several bromide enlargements of landscape-subjects of great size which, unmounted, were fastened at the corners to the walls of the place by means of large thumb-tacks. What puzzled me was that, instead of being taut, the edges of the prints were loose. There was considerable play behind the four edges of each print, which, instead of being flush with the wall, bulged considerably. Not satisfied with the slovenly manner of attaching these really interesting prints, I questioned my host, who explained that the old place was slowly going to pieces. The chimney was coming apart and the walls were cracking. At this point, he showed me numerous cracks in the walls of the room in which we were sitting, which, he said, were gradually widening. It was for this reason that he had fastened the enlarged photographs in the way that he did. As the walls expanded, the prints contracted—a method the old farmer had adopted to keep the prints from being split or torn. Rather ingenious and simple, I thought.

Hazardous Snapshooting

A CAMERIST of my acquaintance told me how he lost the good will of a pretty girl whom he met at a summer-resort, last August. He merely snapshot her. Unhappily, as it turned out, she was unprepared—no facial make-up, not carefully posed. He had her consent to supply a picture of her to the leading local newspaper, for the society column; but it did not occur to him to show her a proof.

The moral of this incident would be to co-operate heartily and carefully with the owner of a pretty face, particularly when she is so painfully critical as in the above-related instance.

Misplaced Nonchalance

CUSTOM-HOUSE officer (to American tourist returning from his first visit to Canada): "What's in those two leather cases?" pointing to the articles in the tonneau of the car.

Tourist (an amateur-photographer) carelessly: "Those are my camera, plates, or something."

Officer: "Let me see the something. Never mind the rest."

Misunderstood

WHEN Hayes, the eminent photographer was engaged to address a class of young women on the subject of photography, he began (tactfully) in this wise: "As I look on your bright and shining faces—", at once twenty-seven powder-puffs were brought forth and applied vigorously.



How to Make a Positive Film by Reversal

THE most important factor in the successful production of good positives by reversing the negative-image is correct exposure. The negative-image before reversal must be of only such density as to allow a corresponding quantity of undeveloped silver to remain for development as the positive image.

▶ This means that any overexposure and consequent overdevelopment will leave too little undeveloped silver behind, and thus the positive image will be weak and thin. On the other hand, underexposure will leave too much undeveloped silver, and the positive will be heavy and dark.

A Suitable Developer

The developer which I have found to be particularly satisfactory is the following:—

Hydroquinone.....	10 grains
Sodium sulphite (cryst.).....	80 “
Caustic soda.....	10 “
Potassium bromide.....	4 “
Phenosafranine solution, 1/1,000.....	50 minims
Water.....	2 ozs.

This developer will be found very clean in working, and will produce results almost identical with those given by the paraphenylenediamine in the maker's formula.

The solution of phenosafranine is added not so much for desensitising, as to exercise a slight retarding-action upon development, and at the same time to keep the shadow portions of the negative clean. It should therefore on no account be omitted.

The normally exposed negative should begin to show some sign of image in about one minute, and if this is the case development is carried to a total time of fourteen minutes. If the film has been overexposed, and the first appearance of the image is apparent in twenty seconds or under, only six minutes' development will be required; while with underexposure and an appearance time of 1½ minutes, development must be carried to the full time of twenty minutes. Longer development tends to give a very grainy image.

When development is completed the film must be washed very thoroughly, as the carrying of developer into the reversing-bath is likely to cause stains and to give uneven reversing-action. The washing must be done in the darkroom.

The negative-image has now to be dissolved out, leaving the undeveloped silver to form the positive.

The reversing-bath may be made up in the following proportions:—

Potassium permanganate.....	2 grains
Sulphuric acid, concentrated.....	10 minims
Water.....	2 ozs.

The film having been thoroughly washed is placed in this bath, and allowed to remain for ten minutes. It will be noticed that the black image becomes dissolved out, showing an opaque positive image.

At the end of ten minutes the film is removed from the reversal bath and washed in running water (in the darkroom), and then taken out into the white light

A satisfactory clearing-bath can be made by dis-

solving sodium sulphite in water, and then, when it has all dissolved, adding a little sulphuric acid. Suitable proportions are:—

Sodium sulphite (cryst.).....	10 grains
Sulphuric acid (conc.).....	5 minims
Water.....	2 ounces

The color of the film upon removal from the reversing-bath approximates deep red; but after a few minutes in the clearing-bath this color disappears, and the film becomes of a whitish color.

At this stage the film must be closely examined for black spots, which appear in the negative-portion, and are due to air-bubbles on the surface which will prevent complete reversal. If such spots are visible the film should be well rinsed in water and returned to the reversing-bath for two minutes; after this, washing and clearing are again necessary.

The film is now ready for the final blackening of the image. This may take place by immersing the film in an ordinary developing-solution, which in my hands has given perfectly satisfactory results. The developer first used may be kept and used for the second darkening. The Pathé instructions recommend a solution composed of bisulphite lye and sodium hydro-sulphite, which is said to give an image with a finer grain. The bath is made up as follows:—

Bisulphite lye.....	30 minims
Sulphuric acid.....	2 “
Sodium hydrosulphite.....	10 grains
Water.....	2 ozs.

In making-up this solution one must be very careful to secure the right salt, which is *hydrosulphite* and not *hyposulphite*. To prevent any mistake, the formula of the correct substance to use is NaHSO_2 . It is not stocked by chemists and druggists in the usual course, but could be obtained to order, or direct from one of the manufacturing chemists. It is also supplied ready for use in the sets which are being issued by the Pathé Company.

The positive image quickly gains density in this bath and assumes a good, black color.

Darkening is complete in about three or four minutes, especially with a freshly-made bath. Old baths fail to darken the image completely, or produce an image of brownish color.

After blackening, the film is washed in running water from ten to fifteen minutes, and is then ready for drying. To facilitate the drying of the film it will be found best to transfer it to a dry-frame. During the transferring, that is, winding from one frame to another, the film should be wiped on both sides with a piece of clean wash-leather, soaked in water and squeezed nearly dry. This will remove all adhering matter, and leave the film clean and free of markings due to lime.

Drying should take place in a current of dry air, and should be completed in about twenty minutes. Prolonged drying is likely to produce “tear” markings on the film, which are very difficult to remove. If it is possible to hang the film in front of an electric fan, drying will take place very quickly and effectively. On no account should it be warmed by placing it in a hot cupboard or in front of a fire.

H. H. FEATHERSTONE in *The Amateur Photographer*.



THE AMATEUR KINEMATOGRAPHER

HERBERT C. MCKAY



THE amateur kinematographer demands attention and he will get it. You are probably all familiar with the name of the New York Institute of Photography of New York. This school has the reputation of being not only the largest, but one of the best photographic schools of the world. The president of this school, Mr. Samuel F. Falk, when approached by the editor of this department concerning a course of instruction for amateurs, gave careful consideration to the proposition and stated that the school would probably institute such a course of instruction in the near future. If this is done, it will be a step of great value to the amateurs and will result in making the miniature camera even more popular in that it will enable the owners of these cameras to obtain far better results than would otherwise be possible. Anyone interested might write to the school with regard to this step. In case any considerable amount of interest is shown, the inauguration of this course will probably be assured.

At the same time, Mr. Falk gave me the description of the new motion camera which is to be issued to the students of the motion-picture school. The present camera is not the type desired by the faculty, so that this new model has been rushed through and will be in use when this article is printed.

The camera is built along the lines of the Wilart news-model. That is, it has a unit body, with outside magazines. The Wilart model had the Geneva sprocket intermittent; but this new camera has a harmonic-cam movement, the highest type of film-movement used in any camera. The camera, as will be seen, is attractive in appearance, and is capable of making professional quality film.

The detailed specifications as given by Mr. Falk are:

Body, Case and magazines of aluminum alloy, finished in glossy, black enamel; *size*, $6\frac{1}{2} \times 6\frac{1}{2} \times 7\frac{3}{4}$ without magazines; *weight*, $12\frac{3}{4}$ pounds with magazine; *capacity*, 200 feet standard-gauge film; *finder*, direct vision; *lens*, Special Kiné Velostigmat F/5, two-inch. Any standard kiné lens may be substituted; *focus*, by scale or by inbuilt visual focusing device; *shutter*, 180-degree fixed shutter; *intermittent*, harmonic-cam; *magazines*, outside, metal, double; *take-up*, visible spring-belt; *movements*, normal and reverse. Single crank supplied at slight additional expense; *film-meter*, inbuilt, set-back meter; and *masks*, mask-slot provided for all trick and double-exposure work.

It will be seen that the camera, as described, compares favorably with many topical cameras; and, as it is, would be a splendid instrument for the beginner in topical work. However, as the New York Institute is in a position to understand the problems which confront the beginner, it has made this camera in such a manner that many accessories may be attached at slight additional cost.

Magazines are furnished which have a capacity of four-hundred feet. This is an obvious advantage when a large footage is necessary at one location. Any desired type of finder may be mounted. All standard kiné lenses may be mounted. The manufacturers of the camera also provide a special micrometer lens-mount for ultra-critical focusing.

A four-lens turret is made which can be easily

mounted upon the camera in place of the original lens plate. This gives the advantage of having a full battery accessible at all times.

The regular shutter may be replaced by an automatic dissolving-shutter. A single crank is provided for animation and trick-work. Veeder-counters reading in frames, turns or feet may be obtained for this camera. Any standard effect may be attached to the camera.

Any standard tripod may be used as the camera is provided with the standard motion-picture tripod-socket. The tripod made for the camera is a light-weight pam-and-tilt tripod and sells at \$37.50.

The standard unit camera, as first described, is ready for straight work without any extras, except tripod and film. For sale to those not members of the school, the camera with an F/3.5 lens instead of the F/5 will sell at a price somewhere between one hundred and one hundred fifty dollars. It will probably be close to one hundred and twenty-five dollars. The extras may be purchased at any later date and added by the owner. This gives amateurs the opportunity to obtain, at a very low cost, a camera which has most of the advantages of the high-priced professional cameras.

The inferior light outdoors, the short days and low temperature now begin to keep us indoors. This winter is the time to try interior work. This will necessitate some kind of artificial light-source. An extremely strong light is not absolutely necessary. Remember that the intensity of light reflected from an object varies in inverse ratio to the distance of the light-source, as well as variations with the color. A light may be placed close to the subject, and with suitable reflectors it need not be overly bright. A small, home-portrait style arc-light should supply all the light necessary for a well-lighted scene, if made close up. This with an incandescent spot-light and one or two 250- or 500-watt incandescent flood-lights will be ample for small scenes.

If you wish to try out bizarre lighting you will find that an incandescent spotlight alone will give accentuation against a black ground which, if properly handled, will result in weird, yet fascinating effects.

For full lighting of a room, say twenty feet wide, with an eight-foot depth of working-space, from six to ten twin arcs should be used, if diffusing-screens are used with the lights. In this case, not less than two spot-lights should be used with the arcs for accentuation. However, this is quite an ambitious performance for the usual amateur. In professional work, even more light than this is used. On the contrary, quite a lot of industrial kinematography is accomplished with two portable twin arcs. It is difficult to give accurate specifications for lights, as the color of the subject, the color of the walls, the number, kind and arrangement of reflectors, the subject, the area illuminated and the result desired all have a bearing upon the problem. Trial-exposures may be made with a small still-camera. Thus if the light is sufficient to give you a good still-film with one-fifth second exposure at F/8, you may be sure that you will get good motion-film at F/3.5. Such test-films may be developed

immediately after exposure. Not more than a half hour should be necessary for the completion of the tests. After the first one, it should not be difficult to determine the lights necessary for any interior work, as one operator will work under similar conditions at almost all times.

If you expect to work under widely varying conditions, the only safe way to determine interior exposure is with an actinometer using sensitive paper. The Bee meters are typical. Such a meter may now be obtained which has been especially designed for use with the new miniature cameras.

Popular Kinematography

Chapter Three

THE CHOICE OF A CAMERA

THERE are various considerations in the choice of the camera. Before we can make such a choice intelligently, we must understand the requirements of the camera itself. Only when we possess such knowledge may we be able to judge the virtues of the instruments offered.

A camera is, first of all, a dark chamber, as we may learn from the name itself. This chamber must exclude all light except that which we have under our control. Therefore, the camera-body must be so made that, although the interior is readily accessible, the doors will close in such a manner that a light-tight joint is effected. It must also be so constructed, that it will continue to do this after years of service. This means that the material should be unaffected by climatic changes—subject only to negligible wear—and accurately made. There is no doubt that metal is the most serviceable material for the construction of the body. Hinged doors should be provided with ledges or grooves which break any straight path through the joint. A comparatively loose but broken joint is more serviceable in stopping light than is a tight, straight-line joint. Screw-caps are the most perfect joints, but awkward in manipulation. A hinged, light-trapped door with positive locking arrangement is very satisfactory.

Into this dark chamber, light must be admitted under control. As daylight varies constantly, we must have some means of regulating the amount admitted so that the film will be affected uniformly at all times. This control is exercised by means of the diaphragm. This may be the familiar iris which works between the lenses, or the more simple rotating stops used by one manufacturer. Both systems have advantages. The iris is placed in the theoretically correct position, between the components of the lens. The opening may be infinitely varied, but it is inadvisable to use any stops except those marked until one becomes thoroughly proficient. Care must be taken to have the two indices exactly opposite, otherwise the value of the opening will not be accurate and exposure-calculations will not be correct. The rotating stops are of unalterable value and are held in the correct position by a spring action. In practical work, this system gives results in every way as satisfactory as those obtained by the iris. The advantage is that the value of the stop is in each case unalterable. Furthermore, the lens lies behind the diaphragm-plate, and is thus effectually shaded. The choice between the two systems is only one of personal choice.

The light-rays must be controlled as to direction as well as to volume. This control is effected by means of the lens which is the eye of the camera. There are

a variety of lenses available for photography, ranging in cost from a few cents to many dollars. The difference in these lenses, disregarding technicalities, lies in the degree to which they give a sharp image over the entire surface of the film.

The simple lens which is used in box-cameras will give us a picture which looks very well in a contact print; but straight lines are bent, and some are blurred. No part of a negative made with such a lens will stand any great degree of enlargement. Moreover the amount of light admitted is small, so that long exposures are required, except when bright sunlight is available.

The double lenses, usually known as rapid rectilinear lenses, give us undistorted lines; but when the center of the picture is sharp, the edges are blurred. This is not apparent in contact prints; but remember that the image on the motion film must be enlarged 100 diameters! Thus it is evident that we must obtain a lens which will give all lines absolutely sharp. That is, with not more than 1/500 of an inch blurring. To obtain such results, an anastigmat lens is necessary. These lenses are so difficult to manufacture that they are of necessity somewhat expensive. When we add the requirement of large opening, in order that we may make the required instantaneous exposure in dull light, we require the finest product of the lens-maker's art. The usual motion lens has an extreme aperture of $F/3.5$. In other words, the amount of light admitted is such that we may obtain a fully timed film in approximately one twenty-first of the time required to get a similar negative in a box-camera. Thus, when we may make good motion film at the full aperture, we should have to give an exposure of nearly three quarters of a second with the Brownie camera. This is basing the motion-picture exposure upon 1/28 of a second, the slowest possible exposure.

Were we considering a still camera, this would about exhaust the list of essentials; but as we are considering a motion camera, we must assure ourselves that an efficient means is provided to move the film. This is of far greater importance than we realise at first thought.

If we project an image thirty by forty inches in size, we have an enlargement of one hundred diameters. Now let us suppose that we have a camera in which the film does not move uniformly. We will consider that the film, which is supposed to move forward three tenths of an inch at each exposure, fails to do this by a margin of one one-hundredth of an inch. That is, the movement might be in this order in five consecutive steps, 0.1–0.09–0.095–0.105–0.105. Upon the screen the first frame will be in its correct position, the next will drop one inch, the next will drop a half inch, the next jumps a full inch, the last will jump a half inch. This means that a variation of 1/100 of an inch in the film-movement will cause the image to dance over the screen in a maddening fashion. The film must move forward with less than 1/1000 of an inch difference in the relative positions of the frames exposed. This means that the mechanism must be delicate, yet rugged enough to stand the strain of making from twenty-eight to thirty-two complete cycles each second, working against the pull of the film.

The mechanism which does this is known as the intermittent. In professional cameras this is usually a complex arrangement known technically as the harmonic-cam mechanism. In the smaller cameras, a simpler mechanism, is used. This is usually a claw working in an interrupted circle. This movement, similar to the piston of an engine, changes continuous circular motion to alternating oscillations. The simpler it is the better, always provided that it gives

satisfactory service. The intermittent provided in the available sub-standard cameras is reliable, regardless of the make of camera. New cameras, that is, new models, should be examined in this particular first of all.

The film must be fed from one receptacle and taken up into another. These are not integral parts of the amateur camera, but are furnished by the manufacturer of the film. The camera, however, must be provided with some movement whereby the exposed film may be wound into the container. This is known as the take-up. The take-up is not a simple apparatus. As the film is wound on to the spool, the diameter of the reel increases. This means that the film will be taken up faster and faster; but this is impossible, as it must feed through the camera-gate at a uniform rate of speed. Therefore, the take-up must be provided by some arrangement which will allow it to slip when a certain amount of strain is placed upon the film. In amateur cameras this is usually provided in the shape of a clutch which slips at a certain tension. Professional cameras have spring-belts running over pulleys. At a certain tension the belt slips upon the pulley.

The intermittent is provided only for the purpose of moving the film properly behind the opening which we know as the aperture. The entire physical movement of the film cannot be effected by the intermittent, for such a demand would mean the destruction of the essential delicacy of movement in the intermittent. For this purpose a sprocket-wheel, or a pair of them are provided which pull the film along in a continuous motion. This relieves the intermittent of all undue strain.

The camera must also be provided with some means of indicating the amount of film used. This may indicate either the amount exposed, or the amount of unexposed film remaining in the magazine. This accessory is essential. Otherwise one would never know the amount of film on hand, for the camera operator has other things upon his mind than counting the crank-revolutions.

Finally, the film must be held in the proper position. That is the plane at which the lens focuses the rays of light. If the film is allowed to vibrate in the slightest, the image would be hopelessly blurred. The film runs past a polished plate of metal. In this plate is cut a hole the exact size of the individual frame, that is, three-tenths by four-tenths of an inch. This is the aperture. The film is held against this polished aperture plate by a spring arrangement known as the pressure plate. As the pressure-plate is usually hinged in order that the surfaces of both aperture plate and pressure-plate may be cleaned, the pressure-plate is sometimes known as the gate and at times the assembly of both plates is given this name.

Thus our camera must have a light-tight body, an efficient diaphragm, a good anastigmat lens, a reliable intermittent movement, a good take-up arrangement, a film-meter and a good gate which will not scratch the film yet which will hold it in position.

The cameras which are offered upon the American market at the present time are all reliable in these respects. The choice of a camera will then depend upon the purposes to which the camera is to be put and the price which one is able to pay.

Motion-Picture Portraiture

No doubt the ideal motion-picture of one's family and friends is the unrehearsed one, and it is doubly successful with the home-audience if the scenes have

been taken without the actors' knowledge. It is rarely, of course, that an opportunity to do this presents itself, but a case may be mentioned to show that it is not impossible.

A friend of mine, who has a house with a garden behind it, and a fairly long path leading from the entrance gate to the front door, gave a garden party to which a number of neighbors were invited. Just beside the front door, and with a window facing down the path to the entrance gate, there is a small room. Here he was able to conceal his kinema camera, pointing out of the open window, through almost drawn curtains. All the guests, as they arrived, were filmed coming up to the front door to ring the bell. None were aware of the presence of the camera.

Afterwards, when the gathering was complete, and people were moving about in the garden at the back of the house, the scene was filmed from another window, which commanded a suitable view. The pictures, shown at a later date to an audience mainly composed of the persons appearing in the film, aroused much interest and a good deal of amusement. The various methods of approach of visitors coming up the path from the gate to the front door were in some instances quite comic in their betrayal of character.

But some of these scenes were a little spoilt, as can easily happen with work of an altogether unfamiliar character. Not that the motion-picture camera is unfamiliar as regards its main principles. These are, of course, only a modification of the photography that we are all used to; but we have to get used to the moving as against the still subject.

Movement so far from being something to guard against is something which we have to introduce or register; and we must remember that there is always a risk of our subject moving out of the picture altogether. The finder must be used not only when we begin turning the handle, but all the time of the exposure.

For instance, he wishes to photograph a mother and her child. The mother is shown seated on a chair on the lawn, and the child comes running and climbs on to her knee. Erect the camera in position, then signal the beginning of the small drama, watch the child's approach closely, and you will almost invariably find that, at the trial attempt, the thing is in some respect not done as well as it could have been done. And each of its wrongnesses suggests some improvement and perhaps some elaboration of the "business".

To begin with, the child must be instructed not to be in too much hurry. Movements must be—relatively—slow, and in any case not jerky. Naturally these remarks apply whether we are instructing a child or an adult. The particular drama mentioned is only used as a specimen case. Then it will be found that entrance from one side is better than entrance from the other; or perhaps a longish approach from the background is best. But, in any case, the approach must be such that the child does not have to cross over in front of the mother, masking her. And, when the child has climbed on to the mother's knee, the angle of vision must be such that at least the profiles of both are visible, or the full face of one and the profile of the other.

All these details will be the better for genuinely observant rehearsal; and it will be discovered that the "victims" enter into the spirit of the thing with great interest—especially when they are children. We are all, in secret, amateur actors, and the kinema camera gives us a delightful opportunity to display our individualities in a new and entertaining manner.

B. G. KENT in *The Amateur Photographer*.



THE MILITARY PHOTOGRAPHER

CAPTAIN A. H. BEARDSLEY, SIGNAL—RES.



Aërial Photography is Coming

APPARENTLY it required only the very elementary account of my aërial photographic experience to bring to light many military and civilian photographers who were deeply interested in photography from an airplane. The article by Russell T. Neville in this issue is a case in point. It was really amazing to note the response which came from all parts of this country. Out at Chanute Field, Rantoul, Illinois, where my own experience was limited to two weeks of active military duty, my efforts were considered to be part of the day's work and merely routine instruction. The results which I obtained were thought fair, taking into consideration my limited experience. So much better work was in evidence on all sides that I realised how far I still had to go to measure up to the splendid standards already set by such an aërial photographer as Captain A. W. Stevens of the Air Service. Whether or not I ever equal the work already done by others, I do feel that my introduction to aërial photography made me conversant with many of the problems which have to be solved, and that I am in a better position to try to do my bit to further this important branch of photography.

Perhaps, best of all, my experience has apparently encouraged other workers, in and out of the U. S. Army, to write of their efforts and thus much interesting and helpful information will be brought to light. The exchange of ideas and of suggestions is always of practical value. This is particularly true of aërial photography which is growing daily in importance as a part of National Defense and as part of the industrial and economic development of our country.

For the Photographic Work of the Army

WHAT follows in this little editorial is not an attempt to add to the burdens of the administration by suggesting or requesting an investigation of the U. S. Army with regard to what it is doing with photography. Rather what I have to say should be accepted as the impressions of one who is deeply interested in the efficient work of the army, particularly with regard to how, when and where photography may be used by the army as a part of national defense and national economic development. Let me add, that not for one moment would I pose as an authority or as one who is fully qualified to say that this is right and that is wrong. However, if by recording some of my impressions, I can encourage abler men than I am to help work out the photographic problems of the army, I shall be glad.

First, let me say that the Army of the United States, and the United States Navy too, may be proud of its photographic personnel. Although the number of expert photographers is pitifully limited by the appropriations, still, those who are in the military or naval service have done and are doing splendid work. In fact, with a few exceptions, the photographic personnel and its efficiency is not so great a problem as that of adequate equipment. Were photographic work in the army and navy confined strictly to war-requirements,

those of our good friends who do not believe in reasonable preparedness might, through their representatives in Congress, block any further efforts to give the services adequate photographic equipment. However, I believe that I may say truthfully, that the photographic work being carried on by the army and navy today is doing more for the economic and educational development of the United States than it is to prepare us for war. In short, an instrument of war is being applied to the pursuits of peace, and with splendid results. If this be true, and I think that it is, it would seem that the photographic work of the army and the navy ought not to be limited but rather encouraged by sufficient funds to meet all reasonable requirements. Nothing that I know would increase the morale and efficiency of officers and men to a greater degree than to give them what they need and what they want to carry on good photographic work on land, sea and in the air.

Yes, the Signal Corps is doing something with photography. So are the Engineers and the Military Intelligence branches of the Army. With the personnel and equipment they have, they are doing creditable work; but it is far from what all could do, and do well, with adequate appropriations. The Air Service is very much in the limelight and its photographic work has received much publicity, well deserved, too. But even the Air Service is lacking in equipment to do its photographic work as it wants to do it. The results of my observations and personal inspection lead me to feel that the country is fully warranted to support and encourage photographic work in the army and the navy. Not as a preparation for war—if that term is objectionable—but as a vital part of our country's development in exploration, mapping, charting and portrayal of scenic beauty. Not only will adequate appropriations make possible such splendid peacetime activities; but we shall develop a trained and veteran officer and enlisted personnel which is active, eager to perfect methods and equipment and happy and contented in its chosen work. Then, should we be so unfortunate as to meet another great emergency, there will be ready a body of men who can very quickly apply their knowledge to the defense of the country.

No, my desire is not to add one cent to the burden of taxation, if it can be avoided; but let us not go to the other extreme and become so miserly that a splendid foundation, built by faithful, loyal officers and men of the army and the navy, shall crumble in the dust. They ask for no millions; but for just enough to enable them to carry on their photographic work effectively, economically and to the credit of the country and the flag they serve.

Let Photographs Bring the Boys Good Cheer

THERE are several thousand men who must needs be away from home and loved ones this Christmas of 1925. To be sure, gifts and messages will be ever so welcome and greatly appreciated; but from my experience nothing quite equals a picture of Mother, Dad, Brother, Sister and the home. Just a little snapshot is the best Christmas-message of all, because it's something that grips the heart as nothing else can.



LONDON LETTER

CARINE AND WILL CADBY



THE Seventieth Annual Exhibition of the Royal Photographic Society opened on the 14th of September. As most of our readers know, this, the oldest of British shows, is an all-embracing affair, and is divided into three parts. Section I—Pictorial Prints; Section II—Pictorial Lantern-Slides, Color-Transparencies and Prints; Section III—Natural History, Photomicrographs, Radiographs, Astronomical, Aërial and Spectrum Photographs, Stereoscopic Work, Scientific Color-Work, Technical Applications of Photography and Kinematography. A glance at this comprehensive list of subjects will convince the reader that virtually every photographic activity comes under one or other of the heads, and therefore the exhibition's interests are very wide and far reaching.

Room No. 2, which comprises the whole of the first floor, is devoted to Pictorial Photography, and here are shown one hundred and twenty-three pictures, the merits of which seem to us somewhat uneven. But has a critical observer ever visited a pictorial photographic exhibition without being able to point out a number of prints that could, with advantage to the prestige of the show, have been dispensed with? Time was when the present writers went around the chief photographic galleries and found many pictures that, if funds had allowed, would have been acquired. Now their covetousness has almost disappeared: a more critical eye, the result of experience or, possibly, the uniformly high technical level of the work shown, has had this result. But anyway, there seem in this section few outstanding "Paradestücke", little that one would want to possess as a decoration.

To our readers, thousands of miles away, it can be of small interest to minutely describe individual exhibits, and difficult as it is to carry a clear recollection of last year's show in the memory, we feel confident that the present one is not its equal. There are good portraits, good landscapes, and unlike the Salon, very few nudes. Last year we thought the show quite equal to the Salon; but this time it is not so. The ebb and flow of outstandingly good work is inevitable. Two or three prolific photographers *at their best* can raise an exhibition far above the average, and we suppose that, like the fruit-trees, they must have their resting years; but one wishes the recuperative time would be a spell of entire rest instead of producing some small fruit.

But in Section II we received an agreeable shock. Under the heading of Pictorial Color Prints we found what seemed to us the best color-work we have seen. A number of studies by M. Chas. Gollhard, of Geneva, arrested our attention. Year after year, we have been disappointed with the color-prints shown, the tones being generally crude and untrue to Nature, and it seemed as if this printing-medium would never attain success. But M. Gollhard's landscapes are in an entirely different category. He rings the changes from a most striking, dark view on the Lake of Geneva to a delicate, rush-bordered, blue landscape, and admirably expressed snow-work. In the last named picture, photography's accurate drawing of snow-forms is subtly blended with the truthful rendering of the play of color on sun-lighted snow. Besides this, M. Gollhard's compositions are eminently satisfactory.

These pictures are really startling; indeed, they might at a glance by the unphotographic individual certainly be taken for good watercolors. And yet there is something in their quality for better or for worse—according to our point of view—that the cleverest watercolor does not possess, and are undoubtedly one of the most interesting developments of this exhibition. There are altogether twenty-nine color-prints shown, and although some of them are certainly an advance on those seen in other years, none compares in purity of color and composition with the work of M. Gollhard, which is all done either in bromoil or bromoil-transfer. In the same room, there are some good color-transparencies with daylight-illumination, and they no doubt gain in luminosity in consequence.

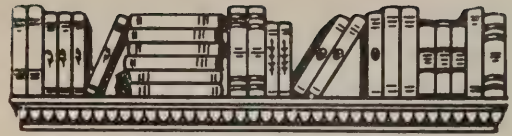
The other sections have much to attract all kinds of photographers. There are excellent prints of many of the instantaneous theatrical photographs that have appeared from time to time in the *Times*, and these show the quite beautiful quality of many of these negatives that was almost lost in the reproductions. The subjects were of necessity all photographed in a weak light, and form a striking landmark in the steady advance of the speed of emulsions. Then, again, the latest aërial photographs that illustrate the application of photography to archaeological research were highly illuminating. In one picture, an ancient village-site could be clearly traced through this summer's growing crops, and another gave the southern part of the earthwork on Hambledon Hall, Dorsetshire, showing an hitherto unsuspected circular earthwork of earlier date. Here and there, in the Scientific and Technical Sections, one came across artistic effects that would not have been out of place in the Pictorial Section, such as many of the wonderful cloud-studies; and under Press Photography there was a delightful view (in profile) of the East Sussex Hounds on Beachy Head, flanked by a glorious sky.

The Natural History Section would have kept any boy absorbed for hours—revealing, as it does, the secrets of bird-and-beast life. On the third floor, a part of the Society's Permanent Collection is shown. It includes a photograph of the Solar Club made by O. G. Rejlander, in 1869, who was one of the fathers of pictorial photography, and the first practical maker of "combination prints".

And yet more exhibitions! The big A. P. M.—in other words the Amalgamated Photographic Manufacturers, Ltd.,—is holding a free exhibition of professional portraiture in important provincial cities. All local professionals are invited to send in four prints each. One of the largest galleries in each town will be hired, and the show is to be boldly and widely advertised. This is a new publicity-movement and extremely advantageous to photographers; who not only get the chance to come in touch with the public and show their work, but have the public drawn to see it by advertising which does not cost them a cent, except, of course, that they must use certain makers' materials.

Surely, 1925 will be remembered as the photographic year. It has been, indeed, a centenary. Even wireless has been called in to play its part, and Marcus Adams has reminded over two million people that

Photography was born in 1825. His broadcast speech was a model of a great deal of matter packed into a small space; and if his prophesies sounded slightly exaggerated to us when we listened in, we were quite convinced when we read the speech in black and white. Photography will develop along the lines he suggests. And, as he says at the end, Wireless and Photography doubtless saved many millions of lives and did much to win the last war. May it please God that, by their aid, another war will never come.



BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices. Send for our list of approved books.

COMING EXHIBITIONS

DECEMBER 1, 1925. Maryland State-Wide Photographic Competition under the auspices of The Photographic Club of Baltimore City, 105 West Franklin Street, Baltimore, Md. Last day for receiving prints December 1, 1925. This competition is open to any amateur who resides in the state of Maryland, and all members of the Photographic Club of Baltimore. Further particulars may be obtained from The Print Director of the club.

DECEMBER 1 to 31, 1925. Fourth Exhibit of Pictorial Photography. The Southwest Museum and the Southern California Camera Club, Los Angeles, Calif. Last day for receiving entries, November 21, 1925. No entry-fee. Mail prints to Fred R. Dapprich, Chairman Print-Committee, Southwest Museum Los Angeles, Calif.

DECEMBER 19, 1925 to JANUARY 10, 1926, inclusive. First Italian Salon of International Photography, Turin, Italy, under the auspices of the Gruppo Piemontese per La Fotografia Artistica and of the Societa Fotografica Subalpina at the Galleria Centrale d'Arte, via Pon. 4, Turin. Last day for receiving prints is November 15, 1925.

JANUARY 4 to 31, 1926. Ninth International Salon of Photography will be held under the auspices of the Camera Pictorialists of Los Angeles, at the Los Angeles Museum; entry-forms will be mailed, or may be had by writing to N. P. Moerdyke, Secretary of the Camera Pictorialists of Los Angeles, 811 Washington Building, Los Angeles, Calif. Last day for receiving prints December 17, 1925.

JANUARY 16 to 31, 1926. Seventh Annual Salon of Photography will be held in the Albright Art Gallery, Buffalo, N.Y., under the auspices of the Buffalo Camera Club. Last day for receiving prints December 28, 1925. Lester F. Davis, secretary, 463 Elmwood Avenue, Buffalo, N.Y.

MARCH 13 to APRIL 18, 1926. The Annual Pittsburgh Salon of Photographic Art will be held at the Art Galleries of the Carnegie Institute under the auspices of the Photographic Section of the Academy of Science and Art. Last day for receiving prints, Saturday, February 13, 1926. Address all communications to P. F. Squier, secretary, 237 Avenue B, Westinghouse Plan, East Pittsburgh, Pa.

Those Photographic Books for Christmas

FROM the way book-orders are coming in these days it would appear that many of our readers are beginning to realise that good photographic textbooks are worth having and worth giving to friends for Christmas. We urge all those who have not yet taken steps to order books for Christmas-gifts to do so at once. If the matter is delayed, we may not be able to make delivery on time.

HISTORY OF THREE-COLOR PHOTOGRAPHY, by E. J. Wall, F.C.S., F.R.P.S. 747 pages, 203 diagrams, addenda, list of periodicals and abbreviations, index to patent-numbers, index to proper names, and general index. Price, cloth \$15.00. Boston: American Photographic Publishing Company, 1925.

Even a superficial examination of this new book by Prof. E. J. Wall convinces one that it is a monumental work. There is nothing just like it in the photographic literature of the world. It is the result of painstaking research for over a period of thirty years. The work of the leading inventors and experimenters in color-photography has been examined, checked up and presented in detail to the sincere student of photography in color. It is not a book for the superficial reader, nor for him who seeks an easy solution of his problem in this branch of photography. However, for the earnest student, the patent-attorney, the trained laboratory-worker, the manufacturer of sensitised photographic products, the technical educational institution and the scientific library, this splendid work will be found of importance and practical value.

The chapters are devoted to Historical and Theoretical Data, Color-Filters or Color-Screens, Still-Cameras and Chromoscopes, Bi-Packs and Tri-Packs, Optical Data, Color-Sensitive Plates, Color-Sensitive Gelatin-Plates, Testing Color-Sensitive Plates, Desensitising Plates, Color-Sensitive Photometric Papers-Sensitising Dyes, Subtractive Processes, Three-Color Transparencies and Lantern-Slides, Screen Plates, Historical and Theoretical Data, Screen-Plate Patents, Screen-Plate Practice, Printing from Screen-Plates, Stereoscopic Pictures with Autochromes, Supplementary Notes on Screen-Plates, Kinematography in Colors, Additive Processes, Dichromate Printing, Double-Coated Stock and The Prismatic Dispersion and Allied Processes.

The volume is carefully printed, serviceably bound in cloth and well written. No expense has been spared to make it exactly what it is—a splendid contribution to the advancement and study of color-photography.

THE YEAR'S PHOTOGRAPHY: An Illustrated Review of the 1925 Exhibition of The Royal Photographic Society, London, with other papers of unusual interest. 106 pages and 85 illustrations. Price, paper-covers 75 cents. Postage 10 cents, New York: Tennant and Ward, American Agents.

Those of our readers who desire a very interesting and profitable survey of the year's photographic work will find in this little volume a delightful evening's reading. In addition to an excellent selection of illustrations, which may well be studied to advantage, there are a number of splendid papers by such well-known workers as T. Thorne Baker, H. D'Arcy Power, A. J. Newton, F. C. Tilney, Fred Judge, J. Dudley Johnston, and others. The typography of the book and the reproductions are excellent. "The Year's Photography" merits a permanent place in every photographic library.



HERE, THERE AND EVERYWHERE

To ensure publication, announcements and reports should be sent in not later than the 5th of the preceding month.



Associated Camera Clubs of America Elect New Officers

THE Associated Camera Clubs of America have elected the following men to serve for the succeeding two years: president, Mr. Louis F. Bucher, Newark, N.J.; vice-president, Mr. E. H. Brown, Dallas, Texas; secretary, Mr. W. C. Mackintosh, San Francisco, California; treasurer, Mr. H. W. Greene, Cincinnati, Ohio.

The following six men were elected to serve on the Board of Directors: Mr. Julius Cindrich, Los Angeles, California; Mr. George W. Harting, New York, N.Y.; Mr. E. Roy Monroe, Portland, Maine; Mr. H. G. Cleveland, Cleveland, Ohio; Mr. John H. Kiem, Orange, New Jersey; and Mr. Paul T. Tarnoski, Chicago, Illinois.

Mr. Julius Cindrich, who served so ably last year as print-director, has been reappointed in the same capacity.

Two additional members have been obtained, bringing the total membership of the Associated Camera Clubs of America to thirty-five—more than half of the camera clubs of this country. The new clubs are: Camera Club of the Syracuse Y. M. C. A., 334 Montgomery Street, Syracuse, N.Y., Kent C. Haven, president; J. O. Sprague, secretary; Omaha Camera Club, 316 Y. M. C. A. Building, Omaha, Nebraska, J. E. Brill, president; William F. Murden, secretary.

The annual interchange of the Associated Camera Clubs of America is now under way. By means of this interchange each member-club of the A. C. C. A. is enabled to see the best work of the other clubs. The interchange has been one of the features of the A. C. C. A. since its founding. Many of the clubs on the circuits exhibit the interchange-sets to the public in their respective cities, thus bringing pictorial photographic art before the layman.

Another feature of the A. C. C. A. is the assistance rendered in organising new camera clubs. Advice, instructions and other helps are freely given to new clubs. The A. C. C. A. is a non-profit organisation developed for the mutual benefit of the member-clubs and for the advancement of photographic art.

E. H. BROWN,
Vice-president A. C. C. A.

Australian Salon of Photoplay, 1926

THE Second International Exhibition of Pictorial Photography will be held in Sydney from June 7 to 19, 1926. The last day for receiving pictures will be the 3d of May, 1926. Conditions governing the salon will be the same as last year and entry-forms containing full particulars will be sent to anyone interested. Copies will be sent, without further request, to all who submitted pictures for the 1924 salon.

Pictures from overseas must not be framed but may be mounted or unmounted. Unmounted or partially mounted pictures will be mounted in Sydney and all will be shown under glass and, more than likely, as on the previous occasion, each picture will be in a frame.

Certain particulars are required by the customs

authorities in Australia which are indicated on the entry-form. Pictures, whether for sale or not, will not be passed by the customs unless they have a value on them. Each entry-form must be accompanied by a Money Order value Five Shillings to cover Entry-Fee, expenses of salon, repacking and return postage on pictures. As there will be no charge for admission to the salon or for catalog, a commission will be charged on all sales effected. Each contributor need only send the five shillings which covers any number of pictures and should not send money to pay the duty. A copy of the catalog will be sent to everyone who submits prints. The catalog for this salon will not be illustrated as *Cameragraphs* will again be issued.

Entry-forms, as mentioned, will be posted at an early date; but anyone unable to obtain a copy need only have page three of entry-form copied. The secretary is Mr. J. G. McColl, F.C.P.A., Box 298 F., G.P.O., Sydney, N.S.W., Australia.

Seattle Camera Club

At a recent meeting of the Seattle Camera Club, Seattle, Wash., the following officers were elected: chairman, Dr. K. Koike; vice-chairman, F. A. Kunishige; executive secretaries, R. C. Weston and Y. T. Iwasaki; exhibition-committee, R. M. Lewis; H. Kira; H. Onishi; Y. Morinaga and Dr. Koike. As our readers may have noted, this new camera club is making a name for itself and we wish it continued success and prosperity.

A Tribute to B. F. Langland

AFTER many years of loving devotion to pictorial photography, Mr. B. F. Langland, of Milwaukee, Wis., has been called from us to the great beyond. Death came to him on September 26, 1925, following an operation; and, in his going, amateur photography in its very highest sense has lost a true and valiant worker for its improvement and success. He and his works are known from coast to coast, and his work throughout his many years of devotion to the art has always taken first rank with the pictorial workers of the time.

The Milwaukee Camera Club, of which he was a leading member, has sustained in his death a serious loss and each individual member, because of his genial and helpful manner, a very personal loss.

His quiet manner, pleasing personality and general personal helpfulness to each individual member created in each an esteem and affection for him that will "Ever keep his memory green." On Wednesday evening October 14 a Memorial Meeting was held in his memory at the club's new quarters in The Milwaukee Art Institute, and it was largely attended. At this time the following lines of appreciation were read by one of his oldest photographic friends.

"We are together tonight to fill, as best we can with our meagre tribute, the vacant place of one who has passed from us into The Great Mystery. Once more it is brought closely to our thoughts, 'Today knoweth

not what the morrow may bring forth.' The relentless hand of Fate has reached into our midst and beckoned one of our brothers to 'Come' with an authority that could not be denied. With shocking suddenness Ben Langland was taken from us, in the very fullness of life and hope and happiness with years of usefulness, enjoyment and achievement before him. None of us can realise what this means to us individually or collectively, nor can we estimate the loss that we have sustained. We grope about in the darkness and cannot know why it is—but through the darkness about us there gleams a ray of light and there shine out, clearly and distinctly across the darkened way, pleasant memories and helpful hours spent with him—the great thing he has given to us all.

"For upwards of twenty years I was so fortunate as to be closely associated with him. We were brought together by the same tie that drew him to you, the same tie that is now holding us together; and from that first meeting an acquaintance sprang up between us which, as the years went on, ripened into a closer and closer friendship that brought us frequently together, from which was born the great esteem and affection I have always had for him. We have motored, camped, canoed and photographed together a large part of our beautiful state, and it was from this close association with him that I learned the true bigness of the man.

"He loved the great outdoors—nature as God gave it to us. He was loyal to his ideals and his ideals were of the highest. He loved the truth, and lived a life true to himself and those most dear to him. He was ever striving to make the accomplishments of the morrow greater than those of today. He gladly gave of his great store of knowledge whatever he could to help each one along. His advice was always good, his opinions always sound, his criticisms always constructive and his praise always deserved. He was a helper to us all and one who always incited us to higher and better things.

"In the record of my own life, his name is beautifully graven on page after page and it is my great pleasure to say to you tonight that as I scan the many pages of that record wherever the name of Ben Langland appears, only the most pleasant and brightest memories are awakened and brought into life and they will always remain with me and will be called into being again and again as the years roll on and I look in retrospect upon the past. That is my great heritage from him.

"One little circumstance has been much in my mind since he left us; and it has given to me the thought of his going that I wish always to carry with me. We were together, with a number of others, in the country making pictures. We would all be together for a time and again widely separated—one working here, another there. Several of us, among whom was Mr. Langland had been together studying a certain subject. Soon I looked about and he was not with us. I asked where he had gone and some one answered, 'He has just gone over the hill'. That is the thought I want to keep of his passing on. I will not let the thought that he will never return come to my mind. I shall always think of him as close at hand 'Just over the hill.'"

Toronto Camera Club

THE annual general meeting and election of officers of The Toronto Camera Club was held at the club-rooms, 2 Gould Street, Toronto, on October 19, and the following officers were elected for the coming year:

Honorary president, Ernest Hoch; past president,

J. H. Mackay; president, Alfred Brigden; 1st vice-president, M. O. Hammond; 2nd vice-president G. R. Smith; secretary, L. H. Fletemeyer; and treasurer, E. J. Long; directors, A. R. Blackburn, S. C. DeWitt, A. E. Cuthbertson, A. T. Roberts, and A. R. Duff; Representative to Canadian National Exhibition, A. R. Blackburn; Representative to Ontario College of Art, H. J. Fairhead.

The past year showed varied and important activities in the club, there having been seven monthly member's print-competitions; one Club Salon at the Toronto Art Gallery, in May, and one International Salon at the Canadian National Exhibition in September. Both salons attracted a large attendance of the public. An ambitious program is being planned for the coming season.

This Club is one of the oldest in America, having been organised in 1887, and is affiliated with the Royal Photographic Society of Great Britain.

Dallas Camera Club at Art Center

AFTER two years at 1707½ Elm Street, Dallas, the camera club of that city has removed to the Associated Arts and Crafts Center of Dallas, Texas, 1907 Main Street. At its new location the club is provided with a large auditorium for the display of its own work and of traveling-exhibitions. The walls are covered with neutral-toned burlap, suitable for the proper display of pictures. Overhead lights are provided for proper illumination and the first prize picture of the club's monthly competitions will be displayed in a well-lighted inset frame lined with black velvet. Pianos are also furnished for informal dances, and there are ample seating-facilities to take care of visitors. The club meets on the first and third Tuesdays of each month, and out-of-town visitors are always welcome.

The club is planning to hold monthly exhibitions of pictorial photography, open to the public. The first of this series will be the Annual Exhibition of the club, held November 3. For this exhibition \$50 in prizes was offered by one of the Dallas newspapers.

The Associated Arts and Crafts Center of Dallas is modeled after the Art Center of New York. A number of the arts and crafts clubs of Dallas have already moved to this new location and it is hoped eventually to include all the art-associations of that city. Each club pays a pro rata proportion of the expense.

A permanent display of paintings is one of the features of the Associated Arts and Crafts Center, and a number of America's leading artists have pictures in this display.

Facts About Underwood & Underwood, Inc.

A NUMBER of our readers have been interested in knowing something about the well-known firm of Underwood & Underwood, Inc., 242 West 55th Street, New York City. The reason is that this firm offers a number of opportunities to the capable amateur and professional photographer and because this large organisation is a striking proof of the importance of photography in the social and industrial life of the world.

Underwood & Underwood, Inc. is the largest of the photographic institutions. For more than forty years the name, itself, has been almost synonymous with photography in the minds of the people of the country. Steady and consistent growth has resulted in a service which today covers the entire range of photography.

This included the furnishing of news-pictures to publications both in this country and abroad. The portrait-studios of this firm have photographed the leaders in the business, governmental and social life of this country for two generations. It has been a pioneer in aerial photography and has established a position of leadership in this comparatively new field.

Advertising-illustrations are handled by a separate division which includes the making of still-life, fashions and advertising-illustrations. A complete building-department is maintained in the Illustration Studios where any scenic effect, indoor or outdoor, simple or complicated, representing any type of locality may be constructed. Illustrations are made in direct full color as well as in black and white. Virtually everything that may be photographed in black and white may also be made in color. The company controls an exclusive process of reproduction for color-negatives that is being used by a considerable number of national advertisers. Lejaren A. Hiller, one of the foremost of the illustrators, is the Director of the Illustration Studios.

Affiliated with Underwood & Underwood, Inc. is the Elliott Service Company, largest producer of photographic advertising. This company manufactures several types of window-display services, all built around news or specially posed series of photographs.

A complete department for the creation and production of industrial motion-pictures is maintained under the direction of Mr. David Pincus and Mr. Joseph Rothman. Everything is handled from one reel of a street-parade to a six or seven-reel feature-picture for legitimate theatrical distribution. Underwood & Underwood motion-pictures are, so far as we know, the only films that have won national distribution from the legitimate motion-picture houses throughout the country.

Staff-photographers operate out of the larger cities and correspondent photographers are situated in virtually every community. Further particulars may be obtained by writing direct to Mr. H. H. Raegen of the service department.

"Aint It the Truth?"

NEVER a verse I wrote but brought
Such kindly words as ne'er bethought;
Never a bit of prose I've writ
But somewhere made its little hit.

And never a verse but someone leered
In mocking me with words that sneered.
So all the prose I ever wrote
Is bad to some, I sadly note.

Thus I am rotten, I am great,
The dear and loving public state.
In desperation I decide
To write and let opinion ride.

If we permit what others say
To govern us in every way
Our useful years should be outrun
With naught attempted, nothing done.

Let's pray for wisdom and for strength
To do what's best so that at length
When life is ebbing we can say,
"I've done a little in my day."

SIGISMUND BLUMANN.



A Good Wide-Angle Photograph

MORE than three thousand persons recently attended the dedicatory services of the new \$3,000,000 fourteen story church-store-office building in Rochester, N.Y., a city of more than 300,000 population. The new building is situated in the very heart of the down-town business section, and is one of the few buildings of its kind in the country.

This is the photograph that the church-authorities have decided to use in all future publicity, which will be nation-wide in scope. The photograph was made by the Rochester Camera Exchange with a Bausch & Lomb Series V 8 x 10 extreme wide-angle Protar lens. We reproduce this picture to make clear to our readers that a good wide-angle lens is a necessity for the industrial photographer in handling such subjects.

What Do You Do with your Old Photographic Magazines?

THERE are many people that subscribe to one or more photographic journals regularly. But what happens to these magazines after they have been read? I should say that most of them are thrown away; others are put into a disorderly pile for future reference, and a very few are preserved for binding at the end of the year.

It often happens that an article read today, and forgotten tomorrow, will prove very useful as time goes on, and the person who throws away his magazines will be confronted by perplexing problems later on—all of which could be avoided had the magazines been preserved. Making a pile of the old magazines will not do; for besides taking up a lot of room, they are not easily accessible, especially if the issue wanted happens to be at the bottom of the pile. So the best way is to preserve each issue and have the year's volume bound by a professional bookbinder, although the binding may be done at home. But for a lasting and permanent volume, nothing can compare with the "bought" binding.

It is a pleasure to preserve the magazines which will prove to be of great value; for each issue is a veritable source of photographic knowledge, which may not be useful when being read, but will be so in time—if the reader continues in his photographic efforts. At any rate, it is best to have the knowledge within arm's reach when wanted—which it never is, unless the issues are bound.

It is a question whether or not the covers and advertising-matter should be removed before binding; but it may be said in favor of removing these pages, that the yearly volume will be thinner and, incidentally, not so costly to bind. This, however, is a matter to be decided by the individual.

After collecting the issues to be bound, place them, one upon another in order of their dates. Then be sure to get a contents-list from the publisher, and place it either in the front or back of the volume, as desired. This is an important part of the volume, as it makes it very easy to find just what article or picture may be wanted. (PHOTO-ERA MAGAZINE issues such a list with each June and December number, so it may not be necessary to write for it.)

It will be found that bound issues of photographic journals will give continued pleasure to anyone photographically inclined—besides being an authority on the art. The average reader does not realise the amount of actual knowledge stored away in such issues—until some authority is wanted to settle a dispute; then it will be found highly useful; for nearly everything is contained in bound volumes, and the more you have of them, the more knowledge is at your disposal—if you take advantage of it. Or, a special formula or method is desired; simply look up the contents-lists of the volumes, and you have it at a moment's notice.

So, if you haven't been in the habit of binding your magazines, begin now by subscribing to your favorites, and thereby ensuring yourself of getting every issue—for that is necessary—and then enjoy watching your photographic library grow. You will come to realise that such volumes are worthy to be placed on your bookshelf, among your best and most thought-of books. And in this case the old saying is very true: "A thing of beauty—and usefulness—is a joy forever."

KARL A. BARLEBEN, JR.

New Catalog Issued by Burke & James

We have examined the new catalog recently issued by Burke & James of Chicago and believe that it will be of interest and value to our readers. It is very complete, lists apparatus and accessories of the latest types and models, and contains much practical information. We are confident that this new catalog will be well received and serve to make Burke & James better known to those who are just entering the professional field.

Questionable Ethics

A YOUNG artist of doubtful talent was visited in his studio by a wealthy merchant. After looking at a number of pictures, the business-man said: "Young man, do you sell many of these pictures?" "Yes," the artist replied, untruthfully, thinking that at last he was about to sell a picture. "Well," said the merchant, "if you will come down to my office, I will give you a well-paid job. For years I have been looking for a salesman like you."

Retail Selling.

A December Revery

THE white-haired, ruddy skinned, portly old gentleman seated in the big armchair held a newspaper in his hand. "Four hundred million Christmas-seals sold in the United States," he read. Deeply absorbed, he finished it. Then he laid the paper on the table beside him, and looked out at the winter-landscape. Once or twice he nodded thoughtfully, and a gentle smile deepened the grooves in the corners of his mouth and spread over all his benign countenance.

The old gentleman's thoughts sped back to a December twenty-one years ago, when a lonely little batch of bright-colored Christmas-seals lay practically unnoticed on a postoffice counter in Denmark. He, Einar Holboell, then an obscure clerk in the little postoffice, had conceived the idea of printing a "Christmas-stamp" to be pasted on Christmas-mail, as a means of raising a few thousand dollars for the construction of a hospital for tuberculous children. So perfectly did the little stickers fulfill their mission that the news spread over the country, and, when Jacob Riis, one of the foremost of America's social service workers, came for a short visit to his mother-country, he heard of the great success of the new idea.

He wrote an enthusiastic story for the *Outlook* on the success of the new Christmas-seal, and Miss Emily Bissell of Wilmington, Delaware, read the article. She decided that if seals could raise money for tuberculosis work in Denmark, they could perhaps do the same in America. And, sure enough, she was able to sell 300,000 seals. From the proceeds, the site was purchased for the first sanatorium in her state.

But the work of the little penny stickers had just begun. From 1908 to 1919 the American Red Cross sponsored the seal-sale, which spread more and more rapidly every year. During that time it bore the organisation's familiar square-armed cross. In 1919 the National Tuberculosis Association and its affiliated organisations conducted the sale.

Last year three of the largest printing-plants in the United States worked for months to the exclusion of all other orders to turn out 1,250,000,000 seals! Approximately \$4,500,000 was raised from the sale of these little carriers of good health. With the money tuberculosis sanatoria, hospitals, clinics, dispensaries, public health nurses, open-air schools and preventoria have been financed. Literally millions of copies of educational printed matter dealing with tuberculosis and general disease prevention have carried the message of good health into American homes. The Modern Health Crusade, probably the largest health education movement in the world, has taught more than 8,000,000 boys and girls daily habits of cleanliness, diet, rest and exercise that will develop robust men and women.

In the little town in faraway Denmark, the old gentleman seated in the big armchair dropped his white head against the upholstered back. A look of smiling contentment and peace settled over his ruddy, cheerful face. He looked so like a personification of Santa Claus that, instinctively, one glanced about the room for the big bag of toys and looked outside the window for his faithful reindeer. But Einar Holboell merely settled himself more comfortably and sighed happily. "After all," he reflected, "it is not given to many of us poor mortals to have their simple ideas result in so much joy to humanity." For a moment he gazed out of the window. Then he shut his eyes and folded his hands in his lap. And so Santa Claus sat dozing, secure in the knowledge that the children of the world would have a merry Christmas.

HELENA LORENZ WILLIAMS.



THE PUBLISHER'S CORNER



A Merry Christmas and a Happy New Year to You All

THIS is the time of year when I feel eager to grasp the hand of every reader and try to convey my sincere wish for a Merry Christmas and a Happy New Year. I know that some hold the idea that being up here on the shores of beautiful Lake Winnepesaukee, in the foothills of the White Mountains of New Hampshire and far away from the rush and activities of a great city I am out of touch, perhaps, with the world at large. Far from it! It is true that I may not be able to call personally on many good friends and readers, but thanks to the radio, the telephone and a large correspondence I am in close touch with things photographic and otherwise. Moreover, I believe that the beauty of the hills and of the lake gives me a glimpse of the deeper, more spiritual realities of life than may be obtained from a city-street or city-crowds. At any rate, mine is the fresh air of the hills, the smell of pines, the song of birds, the glory of the autumnal foliage and the dazzling expanse of snow-covered fields and woodlands. Yes, I do visit the city occasionally; but with all its attractions and many friends, the hills call to me, and among them is a peace and happiness I have found nowhere else. Therefore, my sincere wish to you all is that some of the peace and beauty of the hills may be with you this Christmas-season and that during the coming year it may give you health, happiness and prosperity.

We are Coming Out Strongly for the Beginner

AGAIN let me say that the future of photography rests with the training and enthusiasm of the beginners. In the January, 1926, issue we are going to make a sincere attempt to get every beginner really interested and make it worth his while to *stay interested*. How are we going to do it? Well, we have several ideas about that which we are going to give a trial. What is more, our program will be very elastic, informal and simple. However, throughout our efforts, the first consideration will be to make every beginner feel that our best is always at his service. We wish him to know the sincerity of our desire to help him enjoy his photographic work and that no question is too elementary for him to ask. In short, we are not going to be a bit "highbrow" about this Beginners' Department. Let us make it a friendly, happy exchange of ideas, practical suggestions and mutually helpful correspondence. Let every beginner feel now that he is heartily welcome and that he is fully appreciated.

The Race for the Photo-Era Trophy-Cup

THE starting-shot of the race to win the PHOTO-ERA Trophy Cup was fired at the end of the competitions which ended September 30, 1925. Members of several of the leading camera clubs entered prints and we have assurances of more coming very soon. However, let it not be forgotten that there is much in the old adage about the early bird catching the worm. In this case the Seattle Camera Club is the early bird and has

scored against all the other camera clubs in the country by winning one point. The picture, "The Setting Sun", by R. Sawaji, member of the Seattle Camera Club, Seattle, Washington, won second prize in the Beginners' Competition, and his club has the honor of winning the first point in the race.

Let me repeat that it is very important that camera-club members, who wish their clubs to receive credit for prizes won, must state on data-blanks and prints the name of the club of which they are a member. There are no special rules or regulations. The same rules apply for the Trophy-Cup race as for our regular competitions. Those of you who have put the matter off are advised to act quickly, unless you wish our friends of the Seattle Camera Club to have things all their own way. Let us stir up a bit of friendly rivalry; there is still plenty of opportunity for those who are really interested in photography.

Last Call for December Renewals

SOME reader will probably venture to remind me that I have said enough about this matter of renewing subscriptions and subscribers entering new subscriptions for their friends. Perhaps I have; and, if so, I stand corrected. However, if all my readers could realize how much easier and happier it makes this season of the year to have subscribers renew promptly, I am very sure that each one would see to it without delay. Incidentally, I might add that to enter a subscription properly and accurately requires that each one be handled no less than five times from the moment that it is recorded on the ledger until a stencil for the addressing-machine is ready. By sending in renewals now, the work is spread over a longer period and our office-force is enabled to work to better advantage. And don't forget that a subscription is really a very acceptable Christmas-gift to a friend who owns and uses a camera.

Where Are the Stereophotographers?

ABOUT a year ago there seemed to be a demand for a department devoted to stereophotography. It was with pleasure and anticipation that such a department was included in PHOTO-ERA MAGAZINE. Assurances were given by a reasonably large number of readers that such a department would be welcome and that they would support it with material and suggestions. For a time there seemed to be considerable interest in the venture; but during the past few months it has been a difficult matter to get any response from those who seemed to be enthusiastic stereo-workers. To be sure, death has claimed several who were consistent contributors; but what has become of the others? Yes, they write to me frequently, enter prints in our competitions and appear to be very much interested in photography and in the magazine; but they seem to have little to say about stereophotography. As stated a number of times, it is neither rendering a service nor profitable to continue a department in which there is little, if any, interest. Where are the stereophotographers?

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